Service Manual

ViewSonic VG900b-1

Model No. VLCDS24020-2W

19” Color TFT LCD Display

(VG900b-1_SM_575-Rev. 1.0-October 2002)

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Revision History

Revision	Date	Description Of Changes	Approval
1a	10/2/02	Initial Reversion DCN-2351	K.Yang
1b	11/11/02	Revise DCN-2351	C.Shen

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1. PRECAUTIONS AND NOTICES

Prior to using this manual, please ensure that you have carefully followed all the procedures outlined in the user manual for this product.

Read all of these instructions.

Save these instructions for later use.

Follow all warnings and instructions marked on the product.

Do not use this product near water.

This display should be installed on a solid horizontal base.

When cleaning, use only a neutral detergent cleaner with a soft damp cloth. Do not spray with liquid or aerosol cleaners.

Do not expose this display to direct sunlight or heat. Hot air may cause damage to the cabinet and other parts.

Adequate ventilation must be maintained to ensure reliable and continued operation and to protect the display from overheating. Do not block ventilation slots and openings with objects or install the display in a place where ventilation may be hindered.

Do not install this display near a motor or transformer where strong magnetism is generated. Images on the display will become distorted and the color irregular.

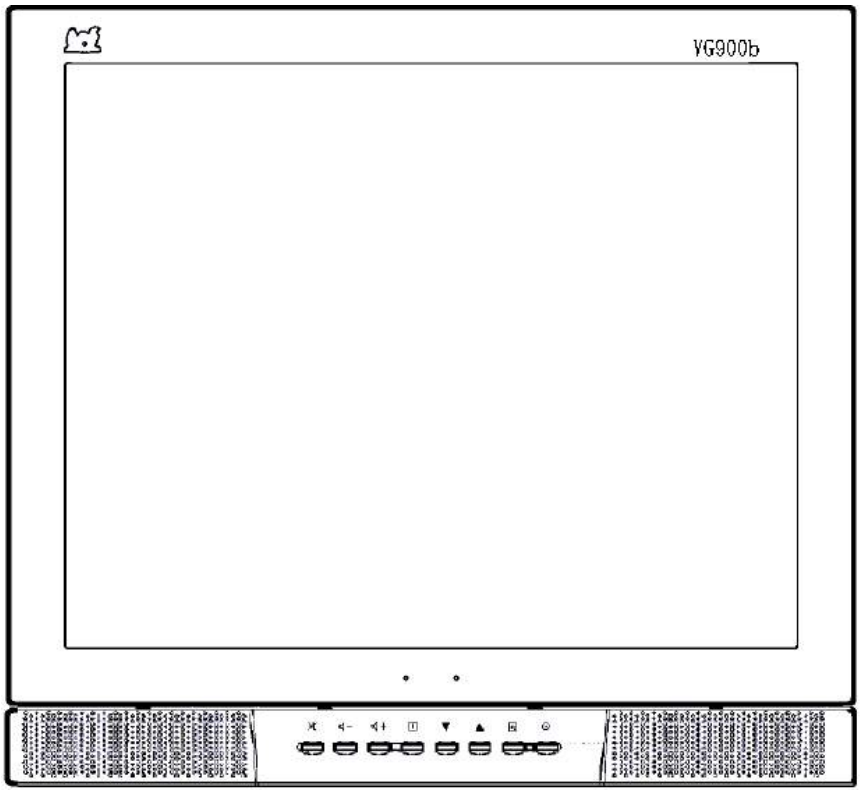
Do not allow metal pieces or objects of any kind fall into the display from ventilation holes.

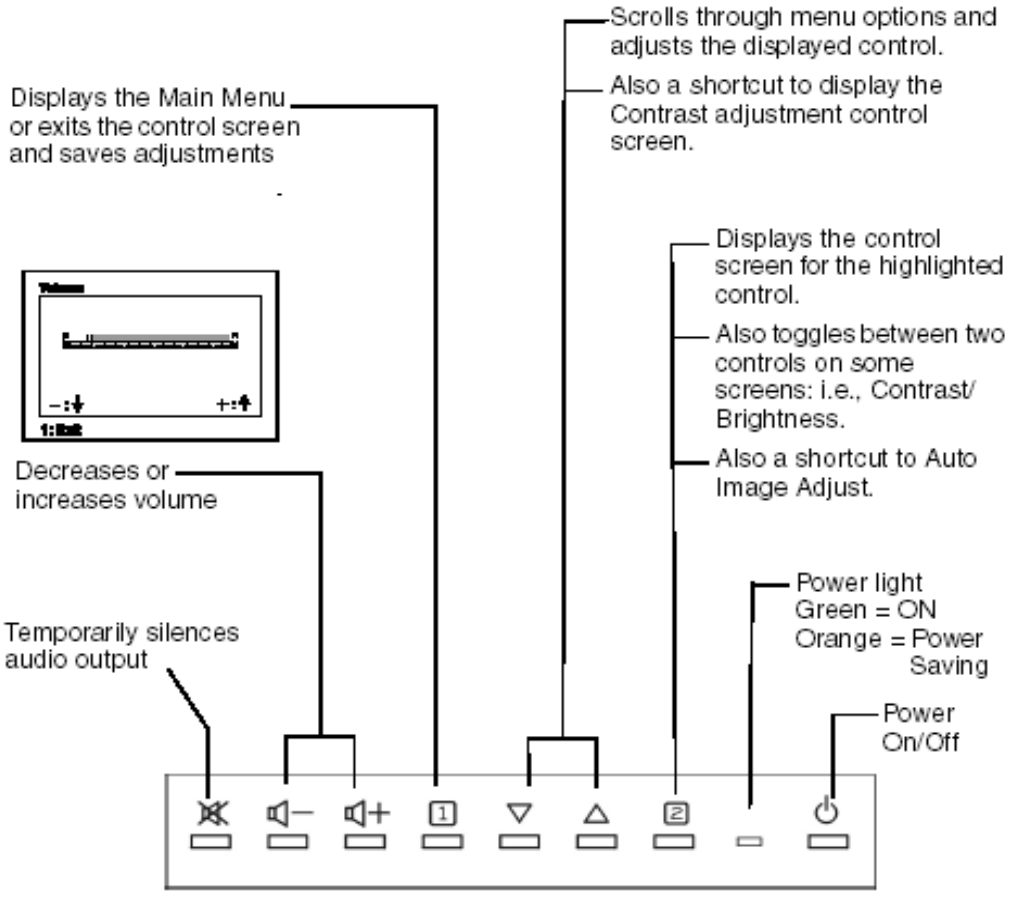
Slots and openings in the cabinet and the back or bottom are provided for ventilation, to ensure reliable operation of the product and to protect it from overheating, those openings must not be blocked or covered. Those openings should never be blocked by placing this product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

1. Specifications

LCD panel type	19.0" TFT(Fujitsu)
Power Consumption	48 W (typ)
Displayable Resolution	SXGA 1280 x 1024 maximum
Pixel dimension	0.294 mm x 0.294 mm
Display Color	16.7 M
Viewing Angle (CR=10)	Horizontal: ±85◦ Vertical: ±85◦
Response Time	25 ms typ.
Contrast Ratio	500:1 typ.
Brightness	250 cd / m^2 typ.
Active Display Area	376 mm horizontal x 301mm vertical
AC/DC adapter	Input:AC 100~264V,47~63 Hz Output:+12V DC.
Dimensions (WxHxD)	439 mm(W) x 465mm(H) x 180mm(D)
Weight	7.5 kg (unit)
Input connector	15 Pin D-Sub.
Power management	YES
Temperature	Operating : 0°C ~ +40°C Storage : -20°C ~ +60°C

3. LOCATION OF CONTROLS




Scrolls through menu options and adjusts the displayed control.
Also a shortcut to display the Contrast adjustment control screen.
Displays the Main Menu or exits the control screen and saves adjustments
Displays the control screen for the highlighted control.
Also toggles between two controls on some screens: i.e., Contrast/ Brightness.
Also a shortcut to Auto Image Adjust.
Decreases or increases volume
Power light
Green = ON
Orange = Power Saving
Temporarily silences audio output
Power On/Off

4. ADJUSTING PROCEDURE

The " adjusting procedure" of VG900b model

1. Turn off the display by power button key on the front of bezel,

2. Disconnect the DC power cable from power jack at rear side.

3. Press and hold the “▲” button key on the front of the bezel

4. Connect the power cable with power jack, and keep pressing the “▲” button key.

5. Press the power button key to turn the display on, and then release the “▲” and power button.

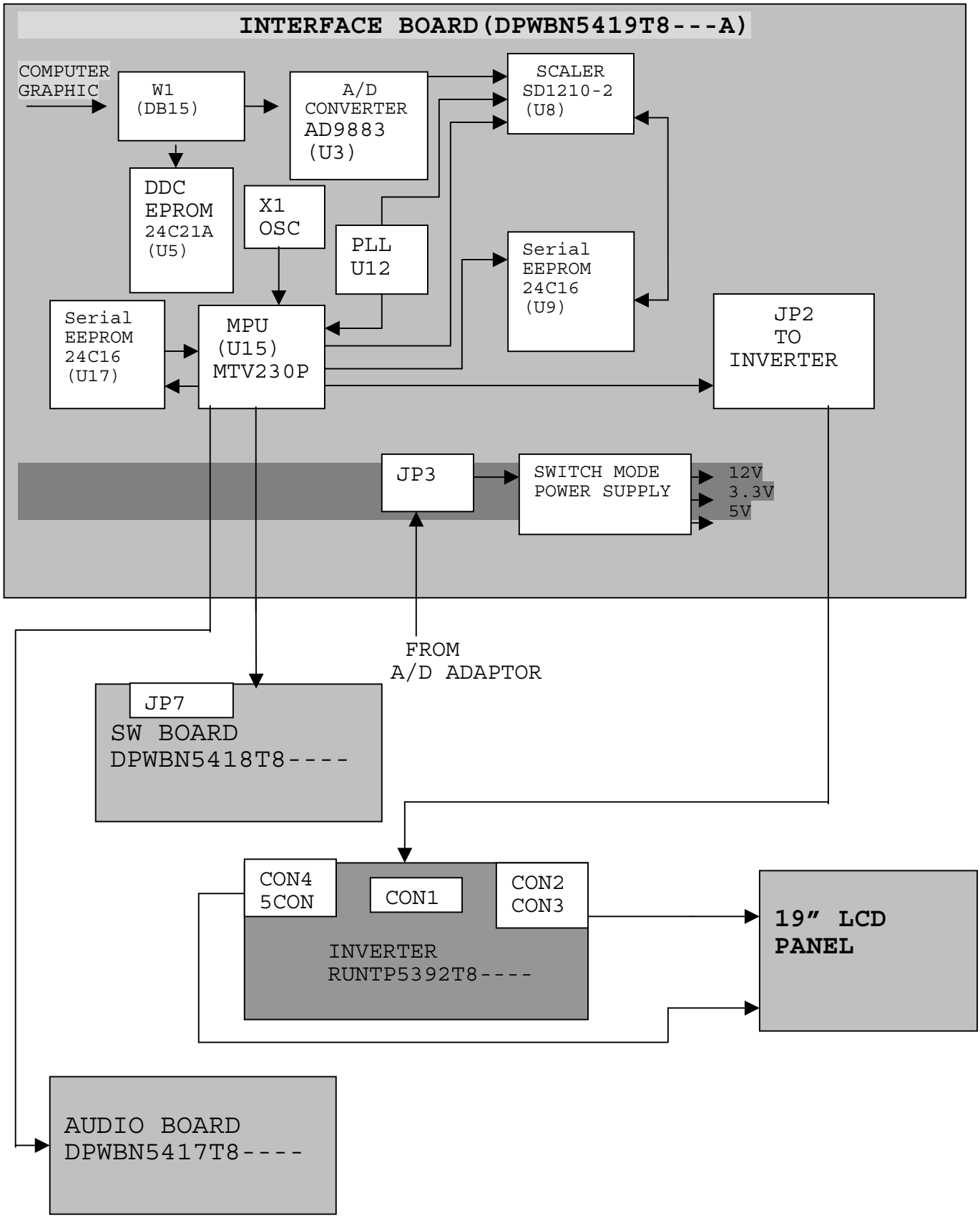
6. The unit is set into Reset mode, OSD main window will be shown on the display,
   you can see a red message for “ALL RESET” with a red frame inside OSD windows.

7. The LED lights up with orange and change to green color during reset procedure.

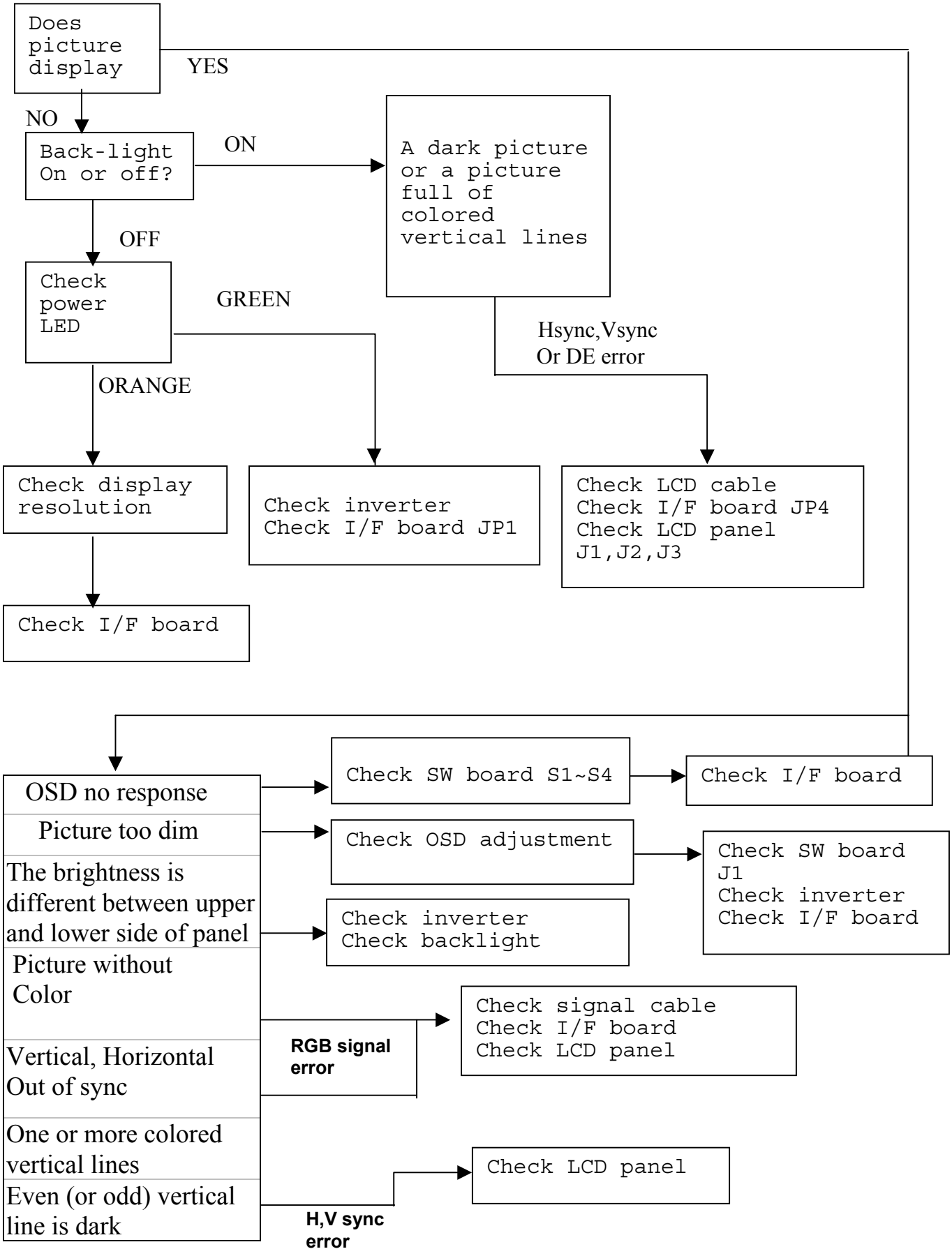
8. OSD changes into a message for "Auto Image Adjust", it disappears after reset procedure.

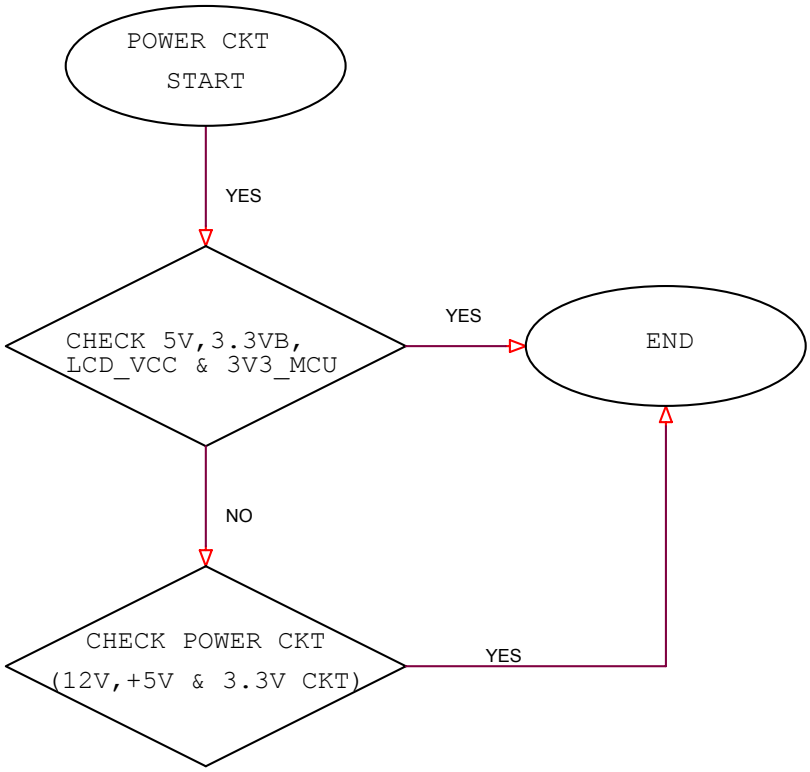
9. The input video signal is shown on display.

5. BLOCK DIAGRAM

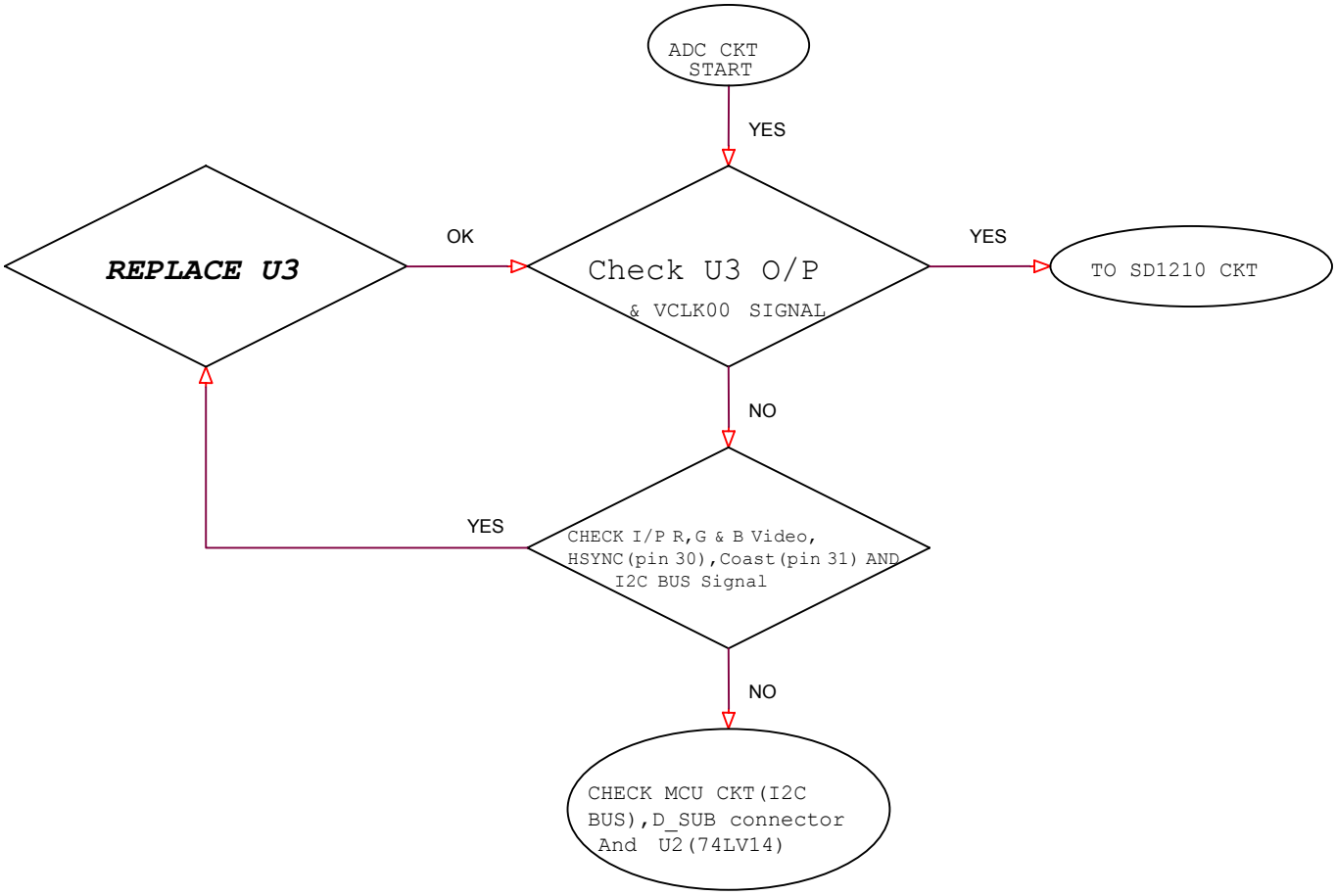


6. TROUBLE SHOOTING FLOW CHART

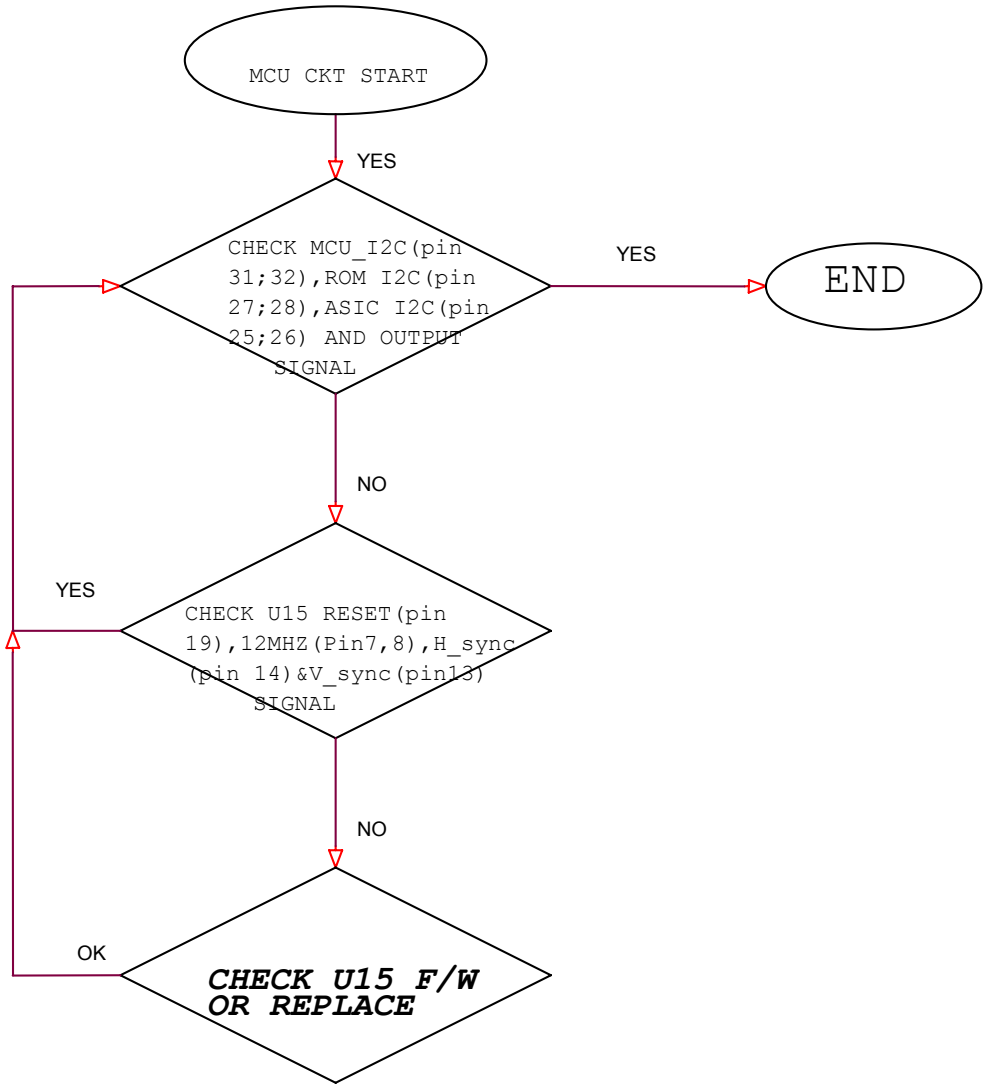



POWER CKT
START
YES
CHECK 5V,3.3VB,
LCD_VCC & 3V3_MCU
YES
END
NO
CHECK POWER CKT
(12V,+5V & 3.3V CKT)
YES

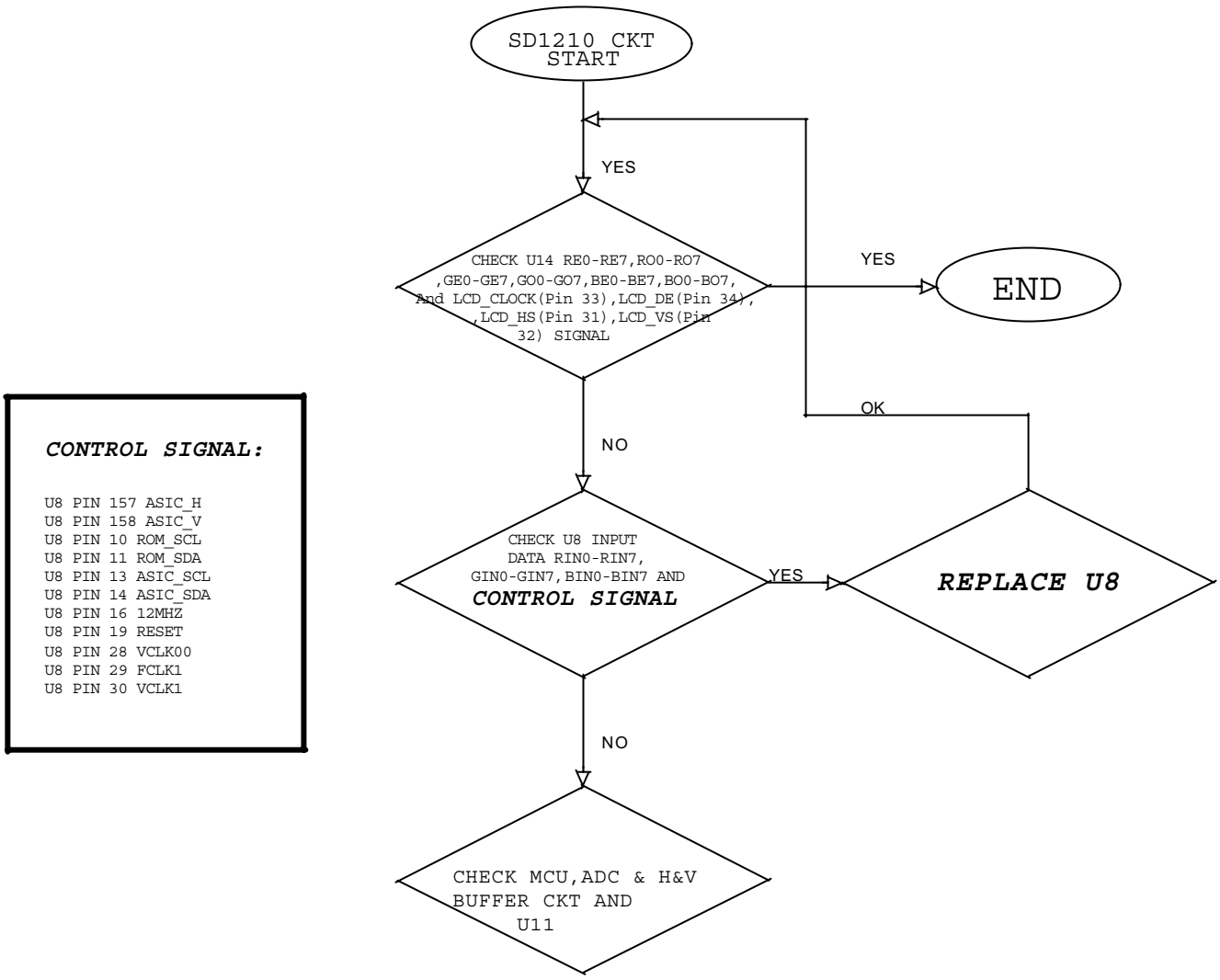
POWER CKT


ADC CKT START
YES
REPLACE U3
OK
Check U3 O/P & VCLK00 SIGNAL
YES
TO SD1210 CKT
NO
YES
CHECK I/P R,G & B Video, HSYNC(pin 30),Coast(pin 31) AND I2C BUS Signal
NO
CHECK MCU CKT(I2C BUS),D_SUB connector And U2(74LV14)

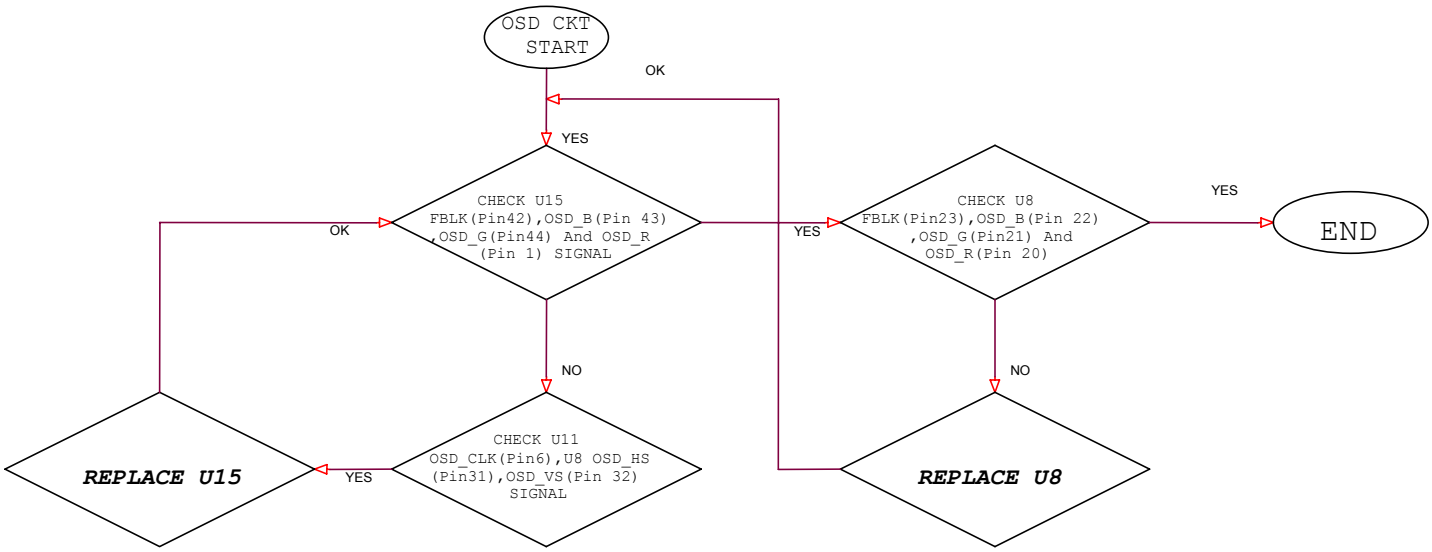
ADC CKT


MCU CKT START
YES
CHECK MCU_I2C(pin 31;32),ROM I2C(pin 27;28),ASIC I2C(pin 25;26) AND OUTPUT SIGNAL
YES
END
NO
YES
CHECK U15 RESET(pin 19),12MHZ(Pin7,8),H_sync (pin 14)&V_sync(pin13) SIGNAL
NO
OK
CHECK U15 F/W OR REPLACE

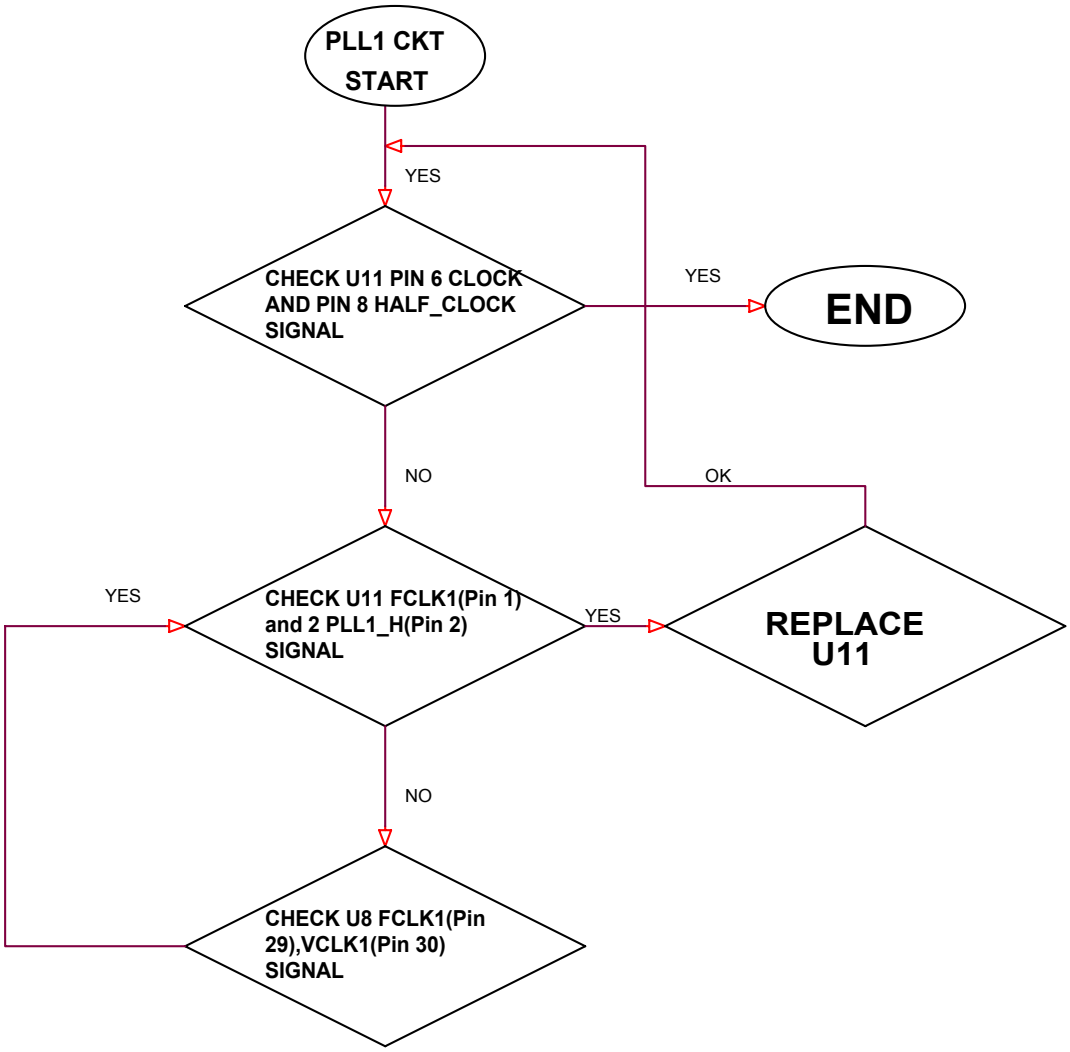
MCU CKT


SD1210 CKT START
YES
CHECK U14 RE0-RE7,RO0-RO7 ,GE0-GE7,GO0-GO7,BE0-BE7,BO0-BO7, And LCD_CLOCK(Pin 33),LCD_DE(Pin 34), ,LCD_HS(Pin 31),LCD_VS(Pin 32) SIGNAL
YES
END
OK
NO
CHECK U8 INPUT DATA RIN0-RIN7, GIN0-GIN7,BIN0-BIN7 AND CONTROL SIGNAL
YES
REPLACE U8
NO
CHECK MCU,ADC & H&V BUFFER CKT AND U11
CONTROL SIGNAL:
U8 PIN 157 ASIC_H
U8 PIN 158 ASIC_V
U8 PIN 10 ROM_SCL
U8 PIN 11 ROM_SDA
U8 PIN 13 ASIC_SCL
U8 PIN 14 ASIC_SDA
U8 PIN 16 12MHZ
U8 PIN 19 RESET
U8 PIN 28 VCLK00
U8 PIN 29 FCLK1
U8 PIN 30 VCLK1

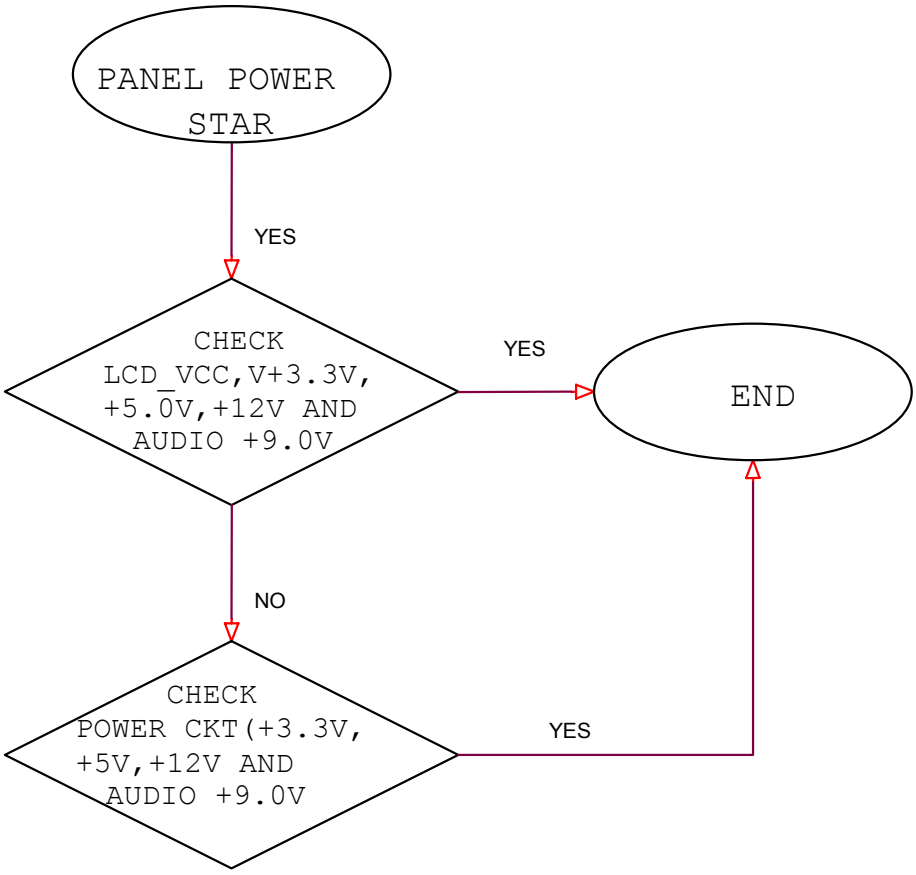
SD1210 CKT


OSD CKT START
OK
YES
CHECK U15 FBLK(Pin42),OSD_B(Pin 43) ,OSD_G(Pin44) And OSD_R (Pin 1) SIGNAL
OK
YES
CHECK U8 FBLK(Pin23),OSD_B(Pin 22) ,OSD_G(Pin21) And OSD_R(Pin 20)
YES
END
NO
NO
REPLACE U15
YES
CHECK U11 OSD_CLK(Pin6),U8 OSD_HS (Pin31),OSD_VS(Pin 32) SIGNAL
REPLACE U8

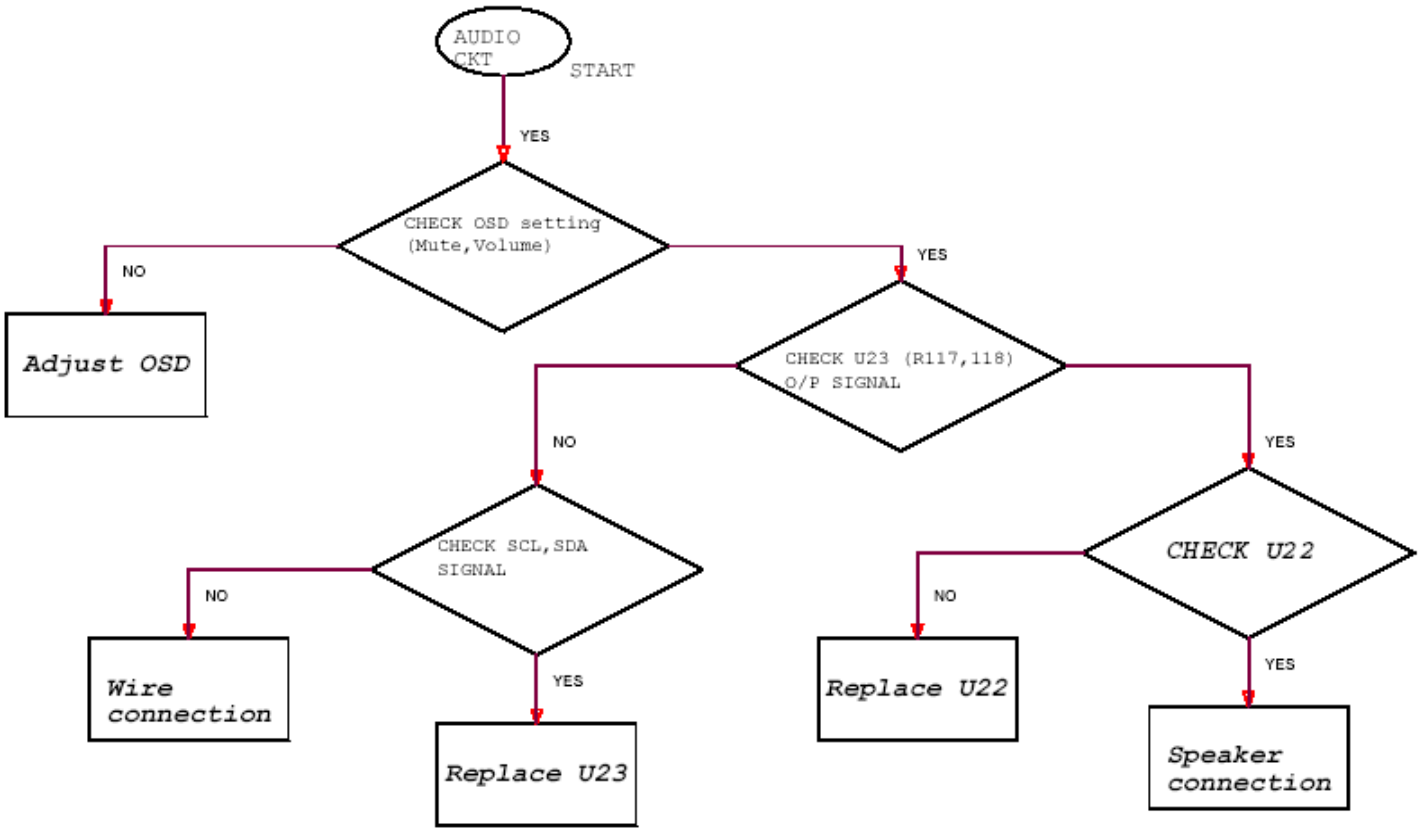
OSD CKT


PLL1 CKT START
YES
CHECK U11 PIN 6 CLOCK AND PIN 8 HALF_CLOCK SIGNAL
YES
END
NO
OK
YES
CHECK U11 FCLK1(Pin 1) and 2 PLL1_H(Pin 2) SIGNAL
YES
REPLACE U11
NO
CHECK U8 FCLK1(Pin 29),VCLK1(Pin 30) SIGNAL

PLL1 CKT



PANEL POWER CKT


AUDIO CKT
START
YES
CHECK OSD setting (Mute,Volume)
NO
Adjust OSD
YES
CHECK U23 (R117,118) O/P SIGNAL
NO
CHECK SCL,SDA SIGNAL
NO
Wire connection
YES
Replace U23
YES
CHECK U22
NO
Replace U22
YES
Speaker connection

AUDIO CKT

7. SPARE PARTS LIST

Name: DPWBN5417T8----

Item No.	Product No.	ViewSonic P/N	Part No.	Location	QTY (pcs)
1	102001		VSILA4635A-----	U22	1
2	102002		VSIPJ7809CZ----	U24	1
3	102002A		VSIPL7809B-----	U24 2nd SOURCE	1
4	102002B		VSIL7809CV-----	U24 2nd SOURCE	1
5	102701		PRDA-1253D8----	HEAT SINK FOR U22	1
6	102702		XEASD30P08000--	SCREW	2
7	202001		QJAKS0005D8D--G	AUDIO IN	1
8	202002		VCNCP0904SEJST-	JP3	1
9	202003		VCNCP0907SEJST-	JP6	1
10	232002	E-D-0403-1832	VSZMTZJ3.9B---U	ZD191,192,193,194	4
11	232002A	E-D-0403-1831	VSZBX79C3V9B--U	ZD191,192,193,194 2nd SOURCE	4
12	232003	E-L-0407-1264	RCORA1021D8--HU	L47	1
13	232004	E-L-0407-1265	RCORA1022D8--HU	L48	1
14	232007		VRMPTV6--242J-U	R113,114	2
15	232008		VRMPTV6--472J-U	R109	1
16	232009	E-R-0405-1250	VRMPTV6--103J-U	R191,192	2
17	232010		VRMPTV6--2R2J-U	R105,106	2
18	232011		VRMPTV6--330J-U	R111,112	2
19	232012		VRMPTV6--472J-U	R117,118	2
20	232013	E-R-0405-1290	VRMPTV6--102J-U	R115,116	2
21	232015	E-C-0404-3994	VCEACU1HH225M-P	C172,181	2
22	232016		VCEACU1HY104Z-P	C158,165,169,171	4
23	232019	E-C-0404-3973	VCEACU1CH107M-P	C160,164,187	3
24	232020	E-C-0404-0944	VCEACU1HH105M-P	C177,178,179,180	4
25	232021	E-C-0404-2263	VCEACU1EH226M-P	C184	1
26	232023	E-C-0404-0943	VCEACU1HH475M-P	C163	1
27	232024		VCEACU1CG477M-P	C161,162,170	3
28	232025	E-C-0404-1199	VCDSDU1HL100D-P	C189,190	2
29	232030	M-WR-0828-0471	QJUM-1045D8050-	J7,8,9,10	4
30	232031	M-WR-0828-0472	QJUM-1045D8075-	J1,J2,J3	3
31	232032	M-WR-0828-0473	QJUM-1045D8100-	J4,J5,L52	3
32	232033	M-WR-0828-0475	QJUM-1045D8150-	J6	1
33	262001		QPWB-5417T8----	AUDIO BOARD	1
34	262002		VSIPT2313L----A	U23	1
35	262003		VCLFHN1HG104Z-A	C173,174,185,186,188	5
36	262004		VCICHN1HG102K-A	C176,183	2
37	262005		VRMDNVG--103J-A	R110,119	2
38	262006	E-L-0407-1559	RFIL-5232T8300A	L50,L51	2
39	262007		VCLFHN1EG224Z-A	C175,182	2

Name: DPWBN5418T8----

Item No.	Product No.	ViewSonic P/N	Part No.	Location	QTY (pcs)
1	207001		QSW-A1124T8----	SW1,2,3,4,5,6,7,8	8
2	207002		VSPSPR-39MVWF--	LED	1
3	207003		VCNCP0908REJST-	JP7	1
4	237001	M-WR-0828-0472	QJUM-1045D8075-	J1,2,3,4,5,6	6
5	267001		QPWB-5418T8--1-	CONTROL BOARD	1
6	267002		VRMDNVG--203J-A	R125	1
7	267003		VRMDNVG--222J-A	R121,124	2
8	267004		VRMDNVG--752J-A	R122,126	2
9	267005		VRMDNVG--472J-A	R120,123	2
10	267006		VCICHN1HH101J-A	C193,194,195	3
11	267007	E-L-0407-1559	RFIL-5232T8300A	L53,54,55,56,57	5

Name: DPWBN5419T8---A

Item No.	Product No.	ViewSonic P/N	Part No.	Location	QTY (pcs)
1	100001	E-C-0404-3972	VCEACU1CH477M-P	C136,142,144,146 (470UF/16V)	4
2	100001A		VCEACU1CG477M-P	SECOND SOURCE	4
3	200001		VCNCP0908REJST-	JP1 (OSD CON)	1
4	200003		VCNCP0906REJST-	JP2 (INVERTER CON)	1
5	200004		QJAKP1044T8----	JP3 (POWER JACK)	1
6	200005		VCNCP0907REJST-	JP4 (AUDIO CON)	1
7	200006	E-IC-0401-2584	VSI24C16-------	U9	1

8	200006C		VSI24C16ADP01--	SECOND SOURCE	1
9	200006D		VSI24C16BP3----	SECOND SOURCE	1
10	200006E		VSI24WC16P-----	SECOND SOURCE	1
11	200007	E-IC-0401-2584	VSI24C16-------	U17	1
12	200007A		VSI24C16ADP01--	SECOND SOURCE	1
13	200007B		VSI24C16BP03---	SECOND SOURCE	1
14	200007C		VSI24WC16P-----	SECOND SOURCE	1
15	200008		RCRSL1132T8----	X1 (12MHz)	1
16	200008A	E-X-0415-0127	RCRSL1167T8----	SECOND SOURCE	1
17	200008B		RCRSL1215T8----	SECOND SOURCE	1
18	200008C		RCRSL1217T8----	SECOND SOURCE	1
19	200009		RFIL-5147T8111-	L30	1
20	200009A		RCHOL1073T8101-	SECOND SOURCE	1
21	200009B		RCHOL1090T8111-	SECOND SOURCE	1
22	200010		QCNCD1173T8----	W1 (DB15,PC99)	1
23	200010A		QCNCD1176T8----	SECOND SOURCE	1
24	200013	E-IC-0401-2137	VSI24C21-------	U5 (ANALOG DDC)	1
25	200013A		VSI24LCS21A----	SECOND SOURCE	1
26	200013B	E-IC-0401-2287	VSI24LC21A-SN-A	SECOND SOURCE	1
27	200701		PRDAA6380D8----	HEAT SINK FOR U8	1
28	200702		PRDA-1252D8----	HEAT SINK FOR U18	1
29	220002	E-IC-0401-2108	VSISM0230-----S	U15	1
30	260001		QPWB-5419T8---C	I/F BOARD	1
31	260002		VSISD1210-----D	U8	1
32	260003	E-IC-0401-2106	VSIAD9883-140-D	U3	1
33	260004	E-IC-0401-2564	VSISN75LVDS83-A	U13,14 (LVDS)	2
34	260004A		VSIDS90C383A--A	SECOND SOURCE	2
35	260004B		VSI63LVDM83A--A	SECOND SOURCE	2
36	260004C		VSICS5828-----A	SECOND SOURCE	2
37	260006		VSI74HC4053---A	U12	1
38	260007		VSILM2596S-5---	U18	1
39	260008		VSIAIC1084-33-A	U21	1
40	260008A		VSIAPL1084-33-A	SECOND SOURCE	1
41	260008B		VSIRT8171-33--A	SECOND SOURCE	1
42	260010		VSIAIC1732----A	U1	1
43	260011		VSISI9433DY---A	U19,20	2
44	260011A		VSIFDS4435----A	SECOND SOURCE	2
45	260011B		VSICEM4435----A	SECOND SOURCE	2
46	260011C		VSIAV9173-01---	SECOND SOURCE	2
47	260012		VSIMK9173-01--A	U11	1
48	260012A		VSIMK9173-01--A	SECOND SOURCE	1
49	260013		VSISN74LV14A--A	U4	1
50	260014		VSI74AHC1G14-TA	U10	1
51	260014A		VSI74AHCT1G14TA	SECOND SOURCE	1
52	260015		VSI74LCX125MXFA	U16	1
53	260022	M-MS-0808-8269	QCNCP1962T8----	J1 (FI-SE30P-HF)	1
54	260022A		QCNCP1961T8----	SECOND SOURCE (FI-S30P-HF)	1
55	260025	E-FS-0410-0099	QFS-Z402F-81UAA	F1 (4A/125V)	1
56	260026	E-D-0403-0531	VSD1N4148-----A	D6	1
57	260027		VSDSS22-------A	D7 (SCHOTTKY DIODE)	1
58	260027A		VSDSS24-------A	SECOND SOURCE	1
59	260027B		VSDSK22-------A	SECOND SOURCE	1
60	260027C		VSDSK24-------A	SECOND SOURCE	1
61	260027D		VSDSS34-------A	SECOND SOURCE	1
62	260027E		VSDLYSS32-----A	SECOND SOURCE	1
63	260027F		VSDSS34----GI-A	SECOND SOURCE	1
64	260027G		VSDSM340A-----A	SECOND SOURCE	1
66	260027H		VSDB340A------A	SECOND SOURCE	1
67	260027I		VSDLYSS24-----A	SECOND SOURCE	1
68	260028		VSDAN202UT106-A	D4	1
69	260029		VSDBAV99------A	D1,2,3	3
70	260029A		VSDBAV99A-----A	SECOND SOURCE	3
71	260030		VSTIRLMS1503--A	Q6,7	2
72	260030A		VSTBSH107-----A	SECOND SOURCE	2
73	260030B		VSISI3442DV---A	SECOND SOURCE	2
74	260032	M-MS-0808-8003	QSOCI1642T844--	U15 (PLCC44	1
75	260032A		QSOCI1645T844--	SECOND SOURCE	1
76	260032B		QSOCI1660T844--	SECOND SOURCE	1
77	260033		VSZRLZ5.6B----A	ZD1,2,3,4,5,10	6

78	260034		VST2N3906-----A	Q3,4	2
79	260035		VST2N3904-----A	Q1,2,5,8,9,10,11,12	8
80	260035A		VSTMMBT3904T-MA	SECOND SOURCE	8
81	260035B		VSTMMBT3904LT-A	SECOND SOURCE	8
82	260045	E-L-0407-1559	RFIL-5232T8300A	L8,9,10,11,12,(0603)	5
83	260046	E-L-0407-1559	RFIL-5232T8300A	L24,(0603)	1
84	260047	E-L-0407-1558	RFIL-5235T8600A	R44	1
85	260048		RFIL-5231T8600A	L19,21,22,23,40,41,42,43,44,45,46,(0805)	11
86	260049		RFIL-5231T8600A	L2,3,20	3
87	260050		RFIL-8187T8500A	L25,26,27,28,29,33,35,36,37,38,47,(1206)	11
88	260051		RFIL-5240T8110A	L4,5,6	3
89	260052		VRMDNVG--000J-A	L7,16,18,31,R85,86	6
90	260053		VRMDNVG--000J-A	R8,38,58,60,80,106,107	7
91	260055		VRMDNVG--101J-A	R21,22,24,62,63,66,74,152	8
92	260057		VRMDNVG--102J-A	R61,67,82,151	4
93	260058		VRMDNVG--103J-A	R9,10,19,20,23,83,94,95,96	9
94	260060		VRMDNVG--104J-A	R88,93,153	3
95	260061		VRMDNVG--105J-A	R72	1
96	260062		VRMDNVG--151J-A	R12,13,16,18	4
97	260063		VRMDNVG--202J-A	R14,15,28,69,70,97,98,99,100,101,102	11
98	260064		VRMDNVG--202J-A	R103,104	2
99	260065		VRMDNVG--220J-A	R17,50,52,54,55,56,84	7
100	260066		VRMDNVG--221J-A	R73	1
101	260067		VRMDNVG--243J-A	R89,90	2
102	260068		VRMDNVG--330J-A	R37,39,40,41,42,43,49,64	8
103	260069		VRMDNVG--330J-A	R65,75,76,78,79	5
104	260070		VRMDNVG--332J-A	R11	1
105	260072		VRMDNVG--4R7J-A	R53	1
106	260073		VRMDNVG--470J-A	R7	1
107	260074		VRMDNVG--472J-A	R45,46,77,91	4
108	260075		VRMDNVG--472J-A	R92,105,108,109,110,111	6
109	260077		VRMDNVG--750J-A	R1,2,3,4,5,6	6
110	260079	E-R-0405-0331	VRMCNVA--330J-A	R68,71,(0805)	2
111	260090		RNWRB1618T8101M	RP1,2,3,4,5,6	6
112	260092		RNWRB1618T8330M	RP19,20,21,22,23,24,25,26	8
113	260093		RNWRB1618T8330M	RP27,28,29,30,31	5
114	260094		RNWRB1618T8472A	RP33,34,35,36,37,38,39	7
115	260100		VCLFHN1HG104Z-A	C1,2,3,4,8,9,10,11,12,13	10
116	260101		VCLFHN1HG104Z-A	C14,20,21,27,29,38,42,43,48	9
117	260103		VCLFHN1HG104Z-A	C73,76,77,78,79,80,81,82,83	9
118	260104		VCLFHN1HG104Z-A	C84,85,86,87,88,89,92,96,98,101	10
119	260105		VCLFHN1HG104Z-A	C103,105,107,109,111,114,116,119,121,123	10
120	260106		VCLFHN1HG104Z-A	C132,133,135,137,138,139,145,150,152,157	10
121	260107		VCLFHN1HG104Z-A	C161,169	2
122	260110		VCLFHN1HG100J-A	C44,162,163,164,165,166	6
123	260111		VCICHN1HH101J-A	C125,130	2
124	260111A		VCLFHN1HG101K-A	SECOND SOURCE	2
125	260112		VCICHN1HG102K-A	C49	1
126	260113		VCIRHN1HG103K-A	C95,102,104,106,108,110,112,115,117,120,122	11
127	260115		VCLFCN1CG105Z-A	C124	1
128	260116		VCICHN1HH220J-A	C128,129	2
129	260117	E-C-0404-4885	VCICHN1HH330J-A	C37,45,62,63,71,131	6
130	260118		VCICHN1EG334Z-A	C148,153,154,158	4
131	260119		VCIRHN1HG392M-A	C41,72	2
132	260120		VCICHN1HG393M-A	C39	1
133	260121		VCICHN1HH470J-A	C40,47,74	3
134	260121A		VCLFHN1HG470K-A	SECOND SOURCE	3
135	260122		VCLFHN1HG473Z-A	C30,33,35	3
136	260124		VCICHN1HB150J-A	C31,34,36	3
137	260124A		VCICHN1HH150K-A	SECOND SOURCE	3
138	260124B		VCLFHN1HG150J-A	SECOND SOURCE	3
139	260130		VCEABN1CX106M-A	C19 (10UF/16V)	1
140	260130A		VCEABN1CX106MNA	SECOND SOURCE	1
141	260131		VCEABN1CX226M-A	C100,113,118 (22UF/16V)	3
142	260132		VCEABN1CX107M-A	C22,28,70,75,99,141,143,147,149,(100UF/16V)	9
143	260132A		VCEABN1CX107MNA	SECOND SOURCE	9
144	260133		VCEABN1CX107M-A	C151,155,156 (100UF/16V)	3
145	260133A		VCEABN1CX107MNA	SECOND SOURCE	3

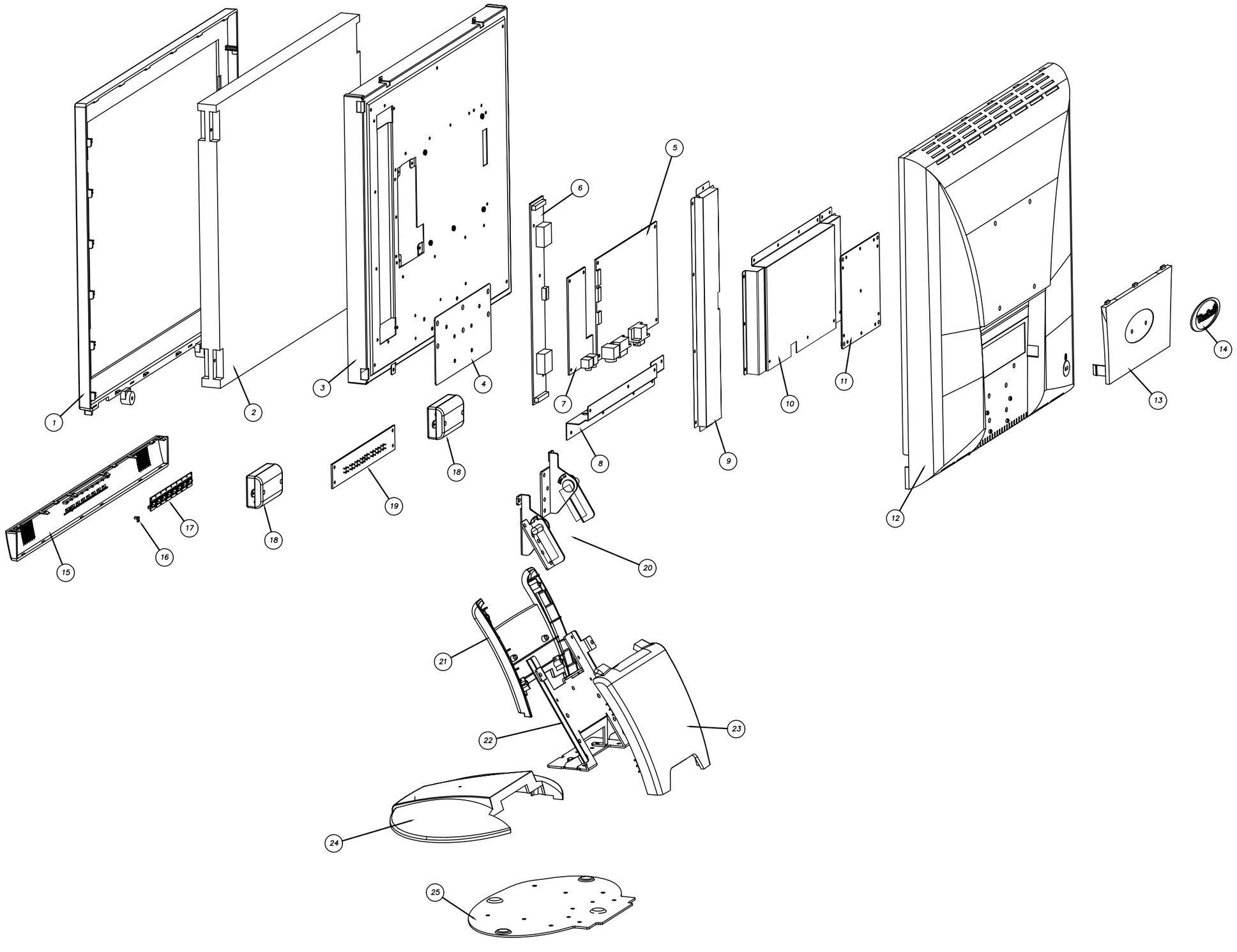
Name: VG900b

Item No.	Product No.	ViewSonic P/N	Part No.	Location	QTY (pcs)
1	414701	PL-PS-0715-0975	GSTN-2875D8F--A	BASE	1
2	414702	M-CV-0830-2352	GSTN-2876D8F--A	BASE FRONT COVER	1
3	414703	M-CV-0830-2353	GSTN-2877D8F--A	BASE BACK COVER	1
4	414704	M-MS-0808-8259	LANG-2051D8----	BASE METAL	1
5	414705	M-MS-0808-8260	LANG-2052D8----	BASE SUPPORT	1
6	414706		XBSSN40P08000--	BASE*4/BASE SUPPORT*7	11
7	414707		XBPSN30P08000--	BASE FRONT COVER*4	4
8	414708	P-FM-0602-0776	PCUSG1581D8---A	CUSHION-A	1
9	414709	P-FM-0602-0777	PCUSG1582D8----	CUSHION-B	1
10	414710	P-FM-0602-0778	PCUSG1583D8----	CUSHION-C	1
11	414711	P-FM-0602-0796	PCUSG1584D8---A	CUSHION-D	1
12	414712	M-MS-0808-8265	MHNGM0031D8----	HINGE ASSEMBLY	1
13	420001		TLABZ3978D8----	HIGH VOLTAGE LABEL	1
14	420004	E-SK-0412-0054	RSPKCL015D84FG-	SPEAKER	1
15	420701	C-FP-0301-0911	GCABA2104D8F--A	CAB-A	1
16	420702	M-CV-0830-2350	GCABB1769D8F--A	CAB-B	1
17	420703	PL-NB-0707-0180	JKNBP2311D8F--A	KNOB	1
18	420704	M-MS-0808-8257	HDECP1937D8F---	LENS	1
19	420705	M-CV-0830-2351	GMSKP1325D8F--A	SPEAKER-COVER	1
20	420706	C-BC-0302-0451	GCOVD2442D8F--A	BACK COVER	1
21	420707	M-MS-0808-8330	HBDG-1278D8F--A	VE-LOGO	1
22	420711	M-MS-0808-8264	LANGN1714D8----	VESA METAL	1
23	420712	M-MS-0808-8258	LANG-2050D8----	D-SUB METAL	1
24	420713	M-MS-0808-8263	LANGH0029D8----	HINGE SUPPORT	1
25	420714	M-MS-0808-8266	PGUM-1105D8----	VESA GUM	4
26	420715	M-LB-0813-0711	HINDA1259D8----	VIEWSONIC TEXT LOGO	1
27	420716	M-MS-0808-6478	HBDGA1724D8----	LOGO PLATE (BIRDS MARK)	1
28	420717		XEPSD30P12WS0--	SPEAKER*4	4
29	420718		XBJSD30P10000--	FOR CAB-A*2	2
30	420719		XEPSD30P12000--	CAB-A*1	1
31	420720		XBMSD30P08000--	FOR CAB-B*5	5
32	420721		XEPSD30P08000--	FOR SW BOARD*4	4
33	420722		XBSSD30P04000-A	D-SUB*3/HINGE SUPPORT*6	9
34	420723		XBPSN40P12JS0--	HINGE SUPPORT WITH MAIN METAL*3	3
35	420724	M-MS-0808-5840	LBOSM1069D8----	BOSS FPR SUB	2
36	420725	M-MS-0808-8261	LANGF2063D8---A	KENSINGTON BRACKET	1
37	420726		XBJSD30P04000--	FOR D-SUB*5	5
38	420727		XBPSN40P10JS0--	HINGE SUPPORT WITH MAIN METAL*2	2
39	420728		PISLV0218D8----	DECORATION PLATE	1
40	420729		PCUSS1402D8----	SPEAKER SPONGE	2
41	420730		PCUSG1608D8----	SPEAKER SCREW RUBBER	4
42	420A02	M-WR-0828-0653	QCNWS0908-8016-	SW WIRE	1
43	420A03	M-WR-0828-0652	QCNWS0907-8015-	AUDIO WIRE	1
44	420A04	M-WR-0828-0650	QCNWS0904-8030-	SPEAKER WIRE	1
45	421000		CPWB-5419T8FUSA	FUJISTU PANEL (19")	1
46	422001	B-SWB-0210-0042	DPWBN5418T8----	CONTROL BOARD ASS'Y	1
47	424001	B-AC-0215-0034	DPWBN5417T8----	AUDIO BOARD ASS'Y	1
48	430002	A-AD-0114-0155	RUNTP5511T8----	AC ADAPTOR (VSC 12V/5A)	1
49	430003		TLABM4318D8T---	MODEL LABEL	1
50	430004		TINSE2968D8----	USER'S MANUAL	1
51	430005	M-MS-0808-8329	DDSKC0038D8----	INF FILE DEVICE	1
52	430007	A-VC-0101-0271	QCODS1584D8D---	SIGNAL CABLE	1
53	430008	A-PC-0106-0180	QACC-1126D8D---	AC POWER CORD	1
54	430009		TLABZ3903D8----	UPC LABEL	1
55	430012	A-AU-0120-0034	QCODK0030D8D---	AUDIO CABLE	1
56	430013	A-PC-0106-0181	QACC-1228T8D-F-	POWER CORD (EU 1.8M BLACK)	1
57	430015		TLAB-5445D8----	S/N LABEL	1
58	430701	P-FM-0602-0797	SPAKA6468D8---A	PACKING	1
59	430702	P-BX-0601-0746	SPAKC3414D8----	CARTON	1
60	430703		SSAKH1356D8-T-A	BAG	1
61	430704		SPAKW1135D8---A	PALLET	1
62	430705	M-MS-0808-5875	SPAKK1703T8Z---	CONNER PAPER	0.25
63	430706		SPAKK6273D8----	CONNER PAPER	0.125

Name: CPWB-5419T8FUSA

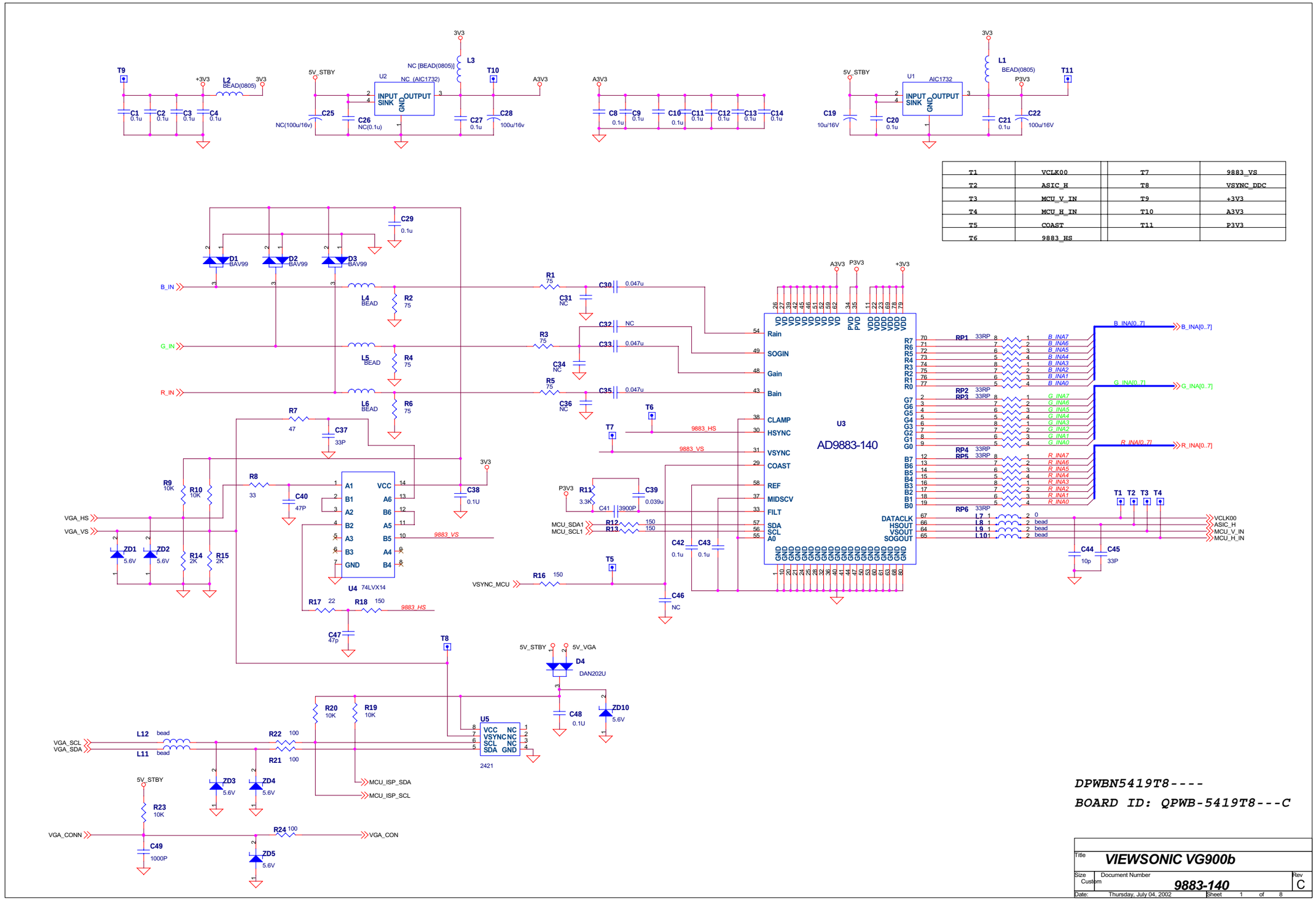
Item No.	Product No.	ViewSonic P/N	Part No.	Location	QTY (pcs)
1	421001	M-LCD-0826-0136	VVLFLC48SXC8V--	FUJISTU PANEL (19")	1
2	421002	B-MB-0201-0697	DPWBN5419T8---A	M/B BOARD ASS'Y	1
3	421003	B-SB-0221-0463	RUNTP5523T8----	INVERTER BOARD	1
4	421701	M-MS-0808-8262	LANGF2068D8----	MAIN METAL	1
5	421702	M-MS-0808-8267	PSLDM6477D8----	M/B SHIELD	1
6	421703	M-MS-0808-8268	PSLDM6478D8---A	INVERTER SHIELD	1
7	421704		PISL-1250D8----	INVERTER MYLER	1
8	421704		PISL-1250D8---A	INVERTER MYLAR	1
9	421705		PISL-1256D8----	INVERTER SHIELD MYLER	1
10	421705		PISL-1256D8---A	INVERTER SHIELD MYLAR	1
11	421706		XBJSD30P10000--	FOR LCD PANEL	4
12	421707		XHISD30P06000--	FOR INV*4, M/B*5 ,AU*4, SHIELD*9, INV*5	27
13	421708		LHLDW1145D8----	PANEL WIRE HOLDER	1
14	421A01	M-WR-0828-0654	QCODS1576D8----	PANEL WIRE	1
15	421A02	M-WR-0828-0651	QCNWS0906-8022-	INVERTER WIRE	1

8. EXPLODED DIAGRAM



MECHANICAL PARTS LIST				
NO	VIEWSONIC P/N	PART NO	QTY	REMARK
1	C-FP-0301-0894	GCABA2104D8F---	1	CAB-A
2		CPWB-5419T8FUSA	1	FUJITSU PANEL(19")
3	M-MS-0808-8262	LANGF2068D8----	1	MAIN METAL
4	M-MS-0808-8263	LANGH0029D8----	1	HINGE SUPPORT
5	B-MB-0201-0697	DPWBN5419T8---A	1	M/B BOARD ASS'Y
6	B-SB-0221-0463	RUNTP5523T8----	1	INVERTER BOARD
7	B-AC-0215-0034	DPWBN5417T8----	1	AUDIO BOARD ASS'Y
8	M-MS-0808-8258	LANG-2050D8----	1	D-SUB METAL
9		PSLDM6478D8----	1	INVETER SHIELD
10	M-MS-0808-8267	PSLDM6477D8----	1	SHIELD
11	M-MS-0808-8264	LANGN1714D8----	1	VESA METAL
12	M-CV-0830-2342	GCABB1769D8F---	1	CAB-B
13	C-BC-0302-0436	GCOVD2442D8F---	1	BACK COVER
14	M-LB-0813-0710	HBDG-1278D8F---	1	VE-LOGO
15	M-CV-0830-2335	GMSKP1325D8F---	1	SPEAKER-COVER
16	M-MS-0808-8257	HDECP1937D8F---	1	LENS
17	PL-NB-0707-0175	JKNBP2311D8F---	1	KNOB
18	E-SK-0412-0054	RSPKCL015D84FG-	2	SPEAKER
19	B-SWB-0210-0042	DPWBN5418T8----	1	CONTROL BOARD ASS'Y
20	M-MS-0808-8265	MHNGM0031D8----	1	HINGE ASSEMBLY
21	M-CV-0830-2336	GSTN-2876D8F---	1	BASE FRONT COVER
22	M-MS-0808-8260	LANG-2052D8----	1	BASE SUPPORT
23	M-CV-0830-2337	GSTN-2877D8F---	1	BASE-BACK COVER
24	PL-PS-0715-0168	GSTN-2875D8F---	1	BASE
25	M-MS-0808-8259	LANG-2051D8----	1	BASE METAL

9 . SCHEMATIC DIAGRAM



T1	VCLK00	T7	9883_VS
T2	ASIC_H	T8	VSYNC_DDC
T3	MCU_V_IN	T9	+3V3
T4	MCU_H_IN	T10	A3V3
T5	COAST	T11	P3V3
T6	9883_HS		

DPWBN5419T8----

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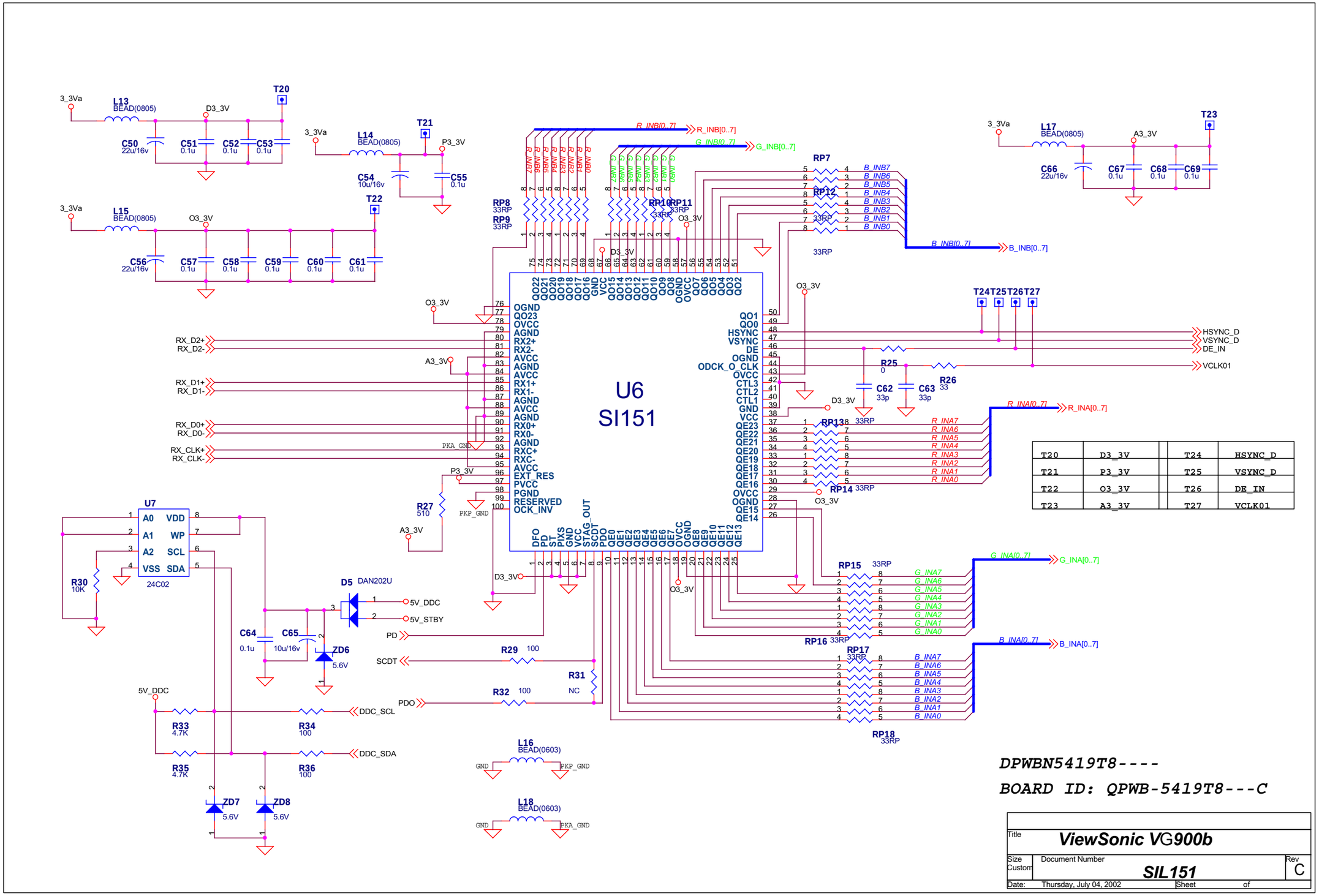

T20	D3_3V		T24	HSYNC_D
T21	P3_3V		T25	VSYNC_D
T22	O3_3V		T26	DE_IN
T23	A3_3V		T27	VCLK01

DPWBN5419T8----

BOARD ID: QPWB-5419T8---C

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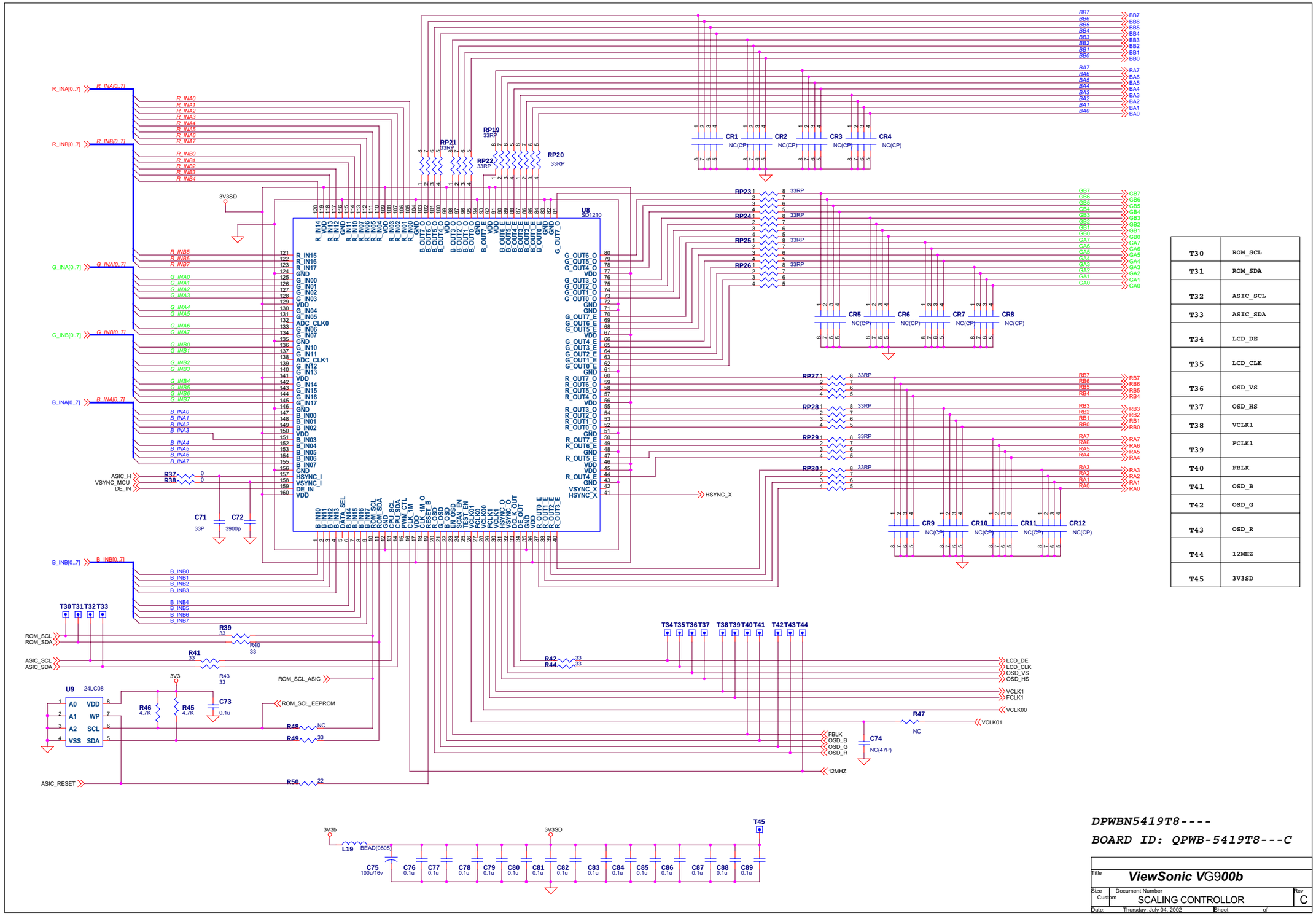

T30	ROM_SCL
T31	ROM_SDA
T32	ASIC_SCL
T33	ASIC_SDA
T34	LCD_DE
T35	LCD_CLK
T36	OSD_VS
T37	OSD_HS
T38	VCLK1
T39	FCLK1
T40	FBLK
T41	OSD_B
T42	OSD_G
T43	OSD_R
T44	12MHZ
T45	3V3SD

DPWBN5419T8----

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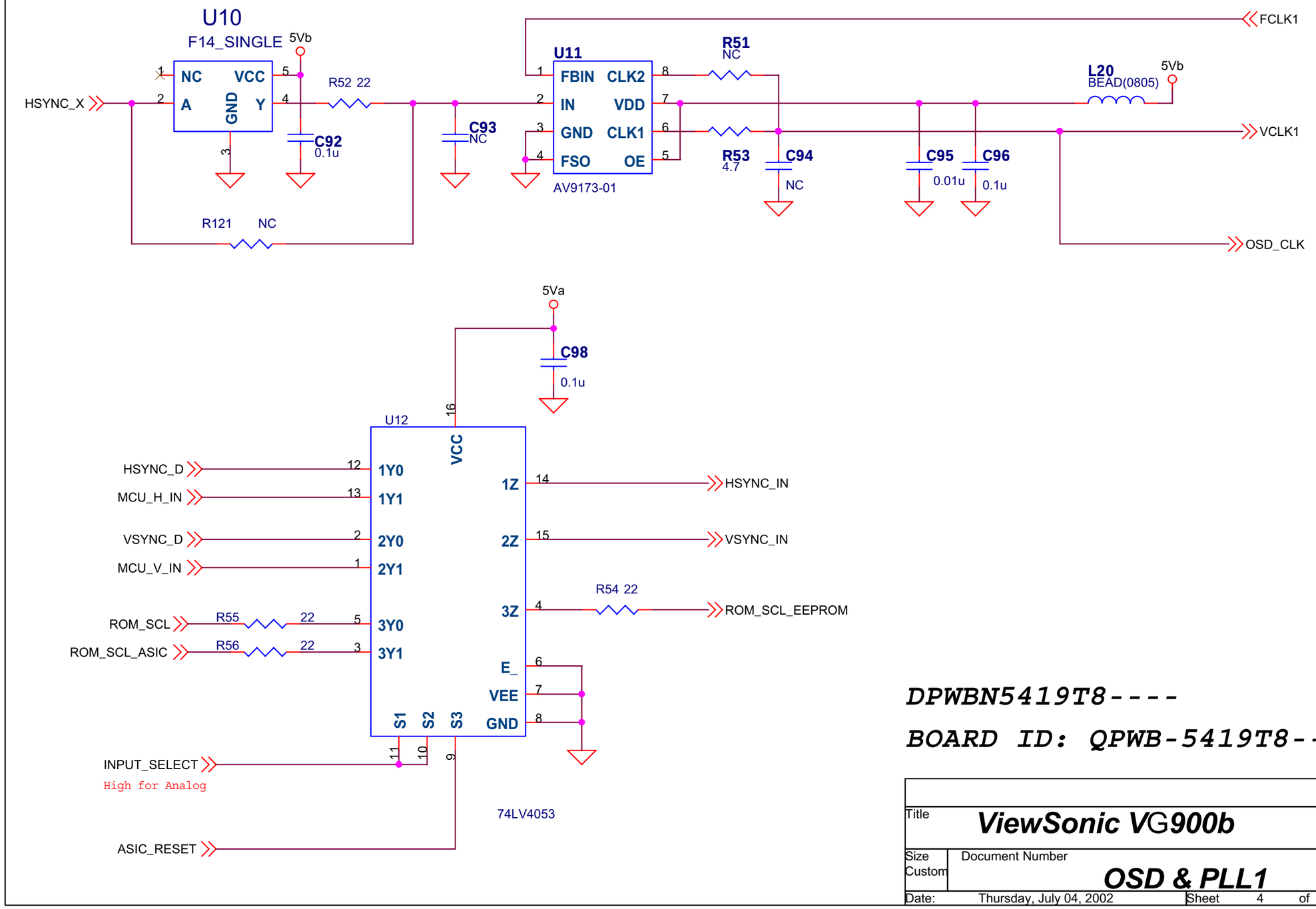
U10
F14_SINGLE
5Vb
NC
VCC
A
GND
Y
HSYNC_X
R52 22
C92
0.1u
C93
NC
R121
NC
U11
FBIN
IN
GND
FSO
CLK2
VDD
CLK1
OE
AV9173-01
R51
NC
R53
4.7
C94
NC
C95
0.01u
C96
0.1u
L20
BEAD(0805)
5Vb
FCLK1
VCLK1
OSD_CLK
5Va
C98
0.1u
U12
VCC
1Y0
1Y1
2Y0
2Y1
3Y0
3Y1
1Z
2Z
3Z
E_
VEE
GND
S1
S2
S3
HSYNC_D
MCU_H_IN
VSYNC_D
MCU_V_IN
ROM_SCL
ROM_SCL_ASIC
R55
R56
22
HSYNC_IN
VSYNC_IN
R54 22
ROM_SCL_EEPROM
INPUT_SELECT
High for Analog
ASIC_RESET
74LV4053
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OSD & PLL1
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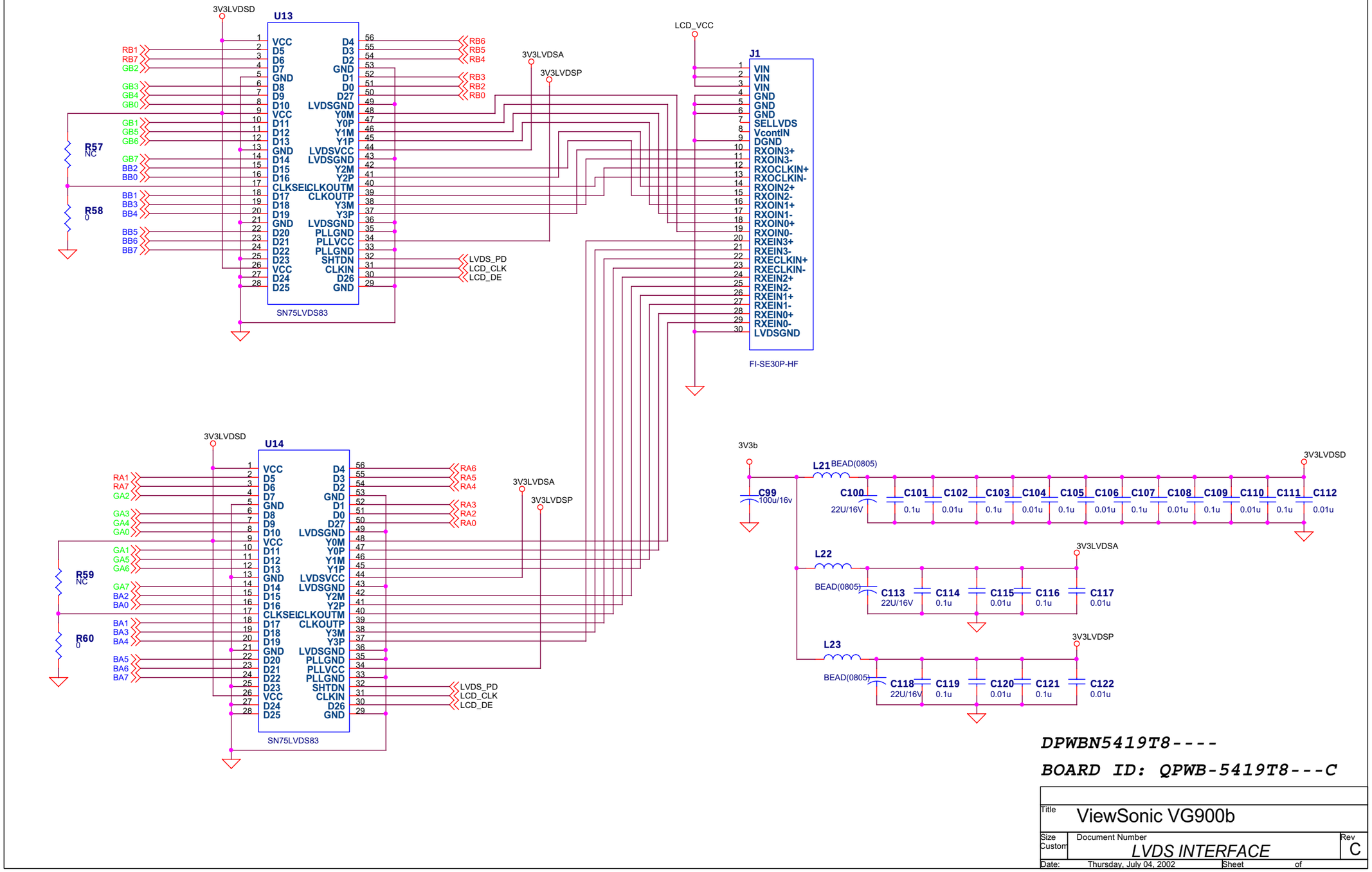
3V3LVDSD
U13
VCC D5 D6 D7 GND D8 D9 D27 D10 VCC D11 D12 D13 GND D14 D15 D16 CLKSEL D17 D18 D19 GND D20 D21 D22 D23 VCC D24 D25
D4 D3 D2 GND D1 D0 LVDSGND Y0M Y0P Y1M Y1P LVDSVCC LVDSGND Y2M Y2P CLKOUTM CLKOUTP Y3M Y3P LVDSGND PLLGND PLLVCC PLLGND SHTDN CLKIN D26 GND
RB1 RB7 GB2 GB3 GB4 GB0 GB1 GB5 GB6 GB7 BB2 BB0 BB1 BB3 BB4 BB5 BB6 BB7
RB6 RB5 RB4 RB3 RB2 RB0
LVDS_PD LCD_CLK LCD_DE
SN75LVDS83
R57 NC
R58 0
3V3LVDSA
3V3LVDSP
LCD_VCC
J1
VIN VIN VIN GND GND GND SELLVDS VcontIN DGND RXOIN3+ RXOIN3- RXOCLKIN+ RXOCLKIN- RXOIN2+ RXOIN2- RXOIN1+ RXOIN1- RXOIN0+ RXOIN0- RXEIN3+ RXEIN3- RXECLKIN+ RXECLKIN- RXEIN2+ RXEIN2- RXEIN1+ RXEIN1- RXEIN0+ RXEIN0- LVDSGND
FI-SE30P-HF
U14
RA1 RA7 GA2 GA3 GA4 GA0 GA1 GA5 GA6 GA7 BA2 BA0 BA1 BA3 BA4 BA5 BA6 BA7
RA6 RA5 RA4 RA3 RA2 RA0
LVDS_PD LCD_CLK LCD_DE
SN75LVDS83
R59 NC
R60 0
3V3b
L21 BEAD(0805)
C99 100u/16v
C100 22U/16V
C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 0.1u 0.01u
L22 BEAD(0805)
C113 22U/16V
C114 C115 C116 C117 0.1u 0.01u
L23 BEAD(0805)
C118 22U/16V
C119 C120 C121 C122 0.1u 0.01u
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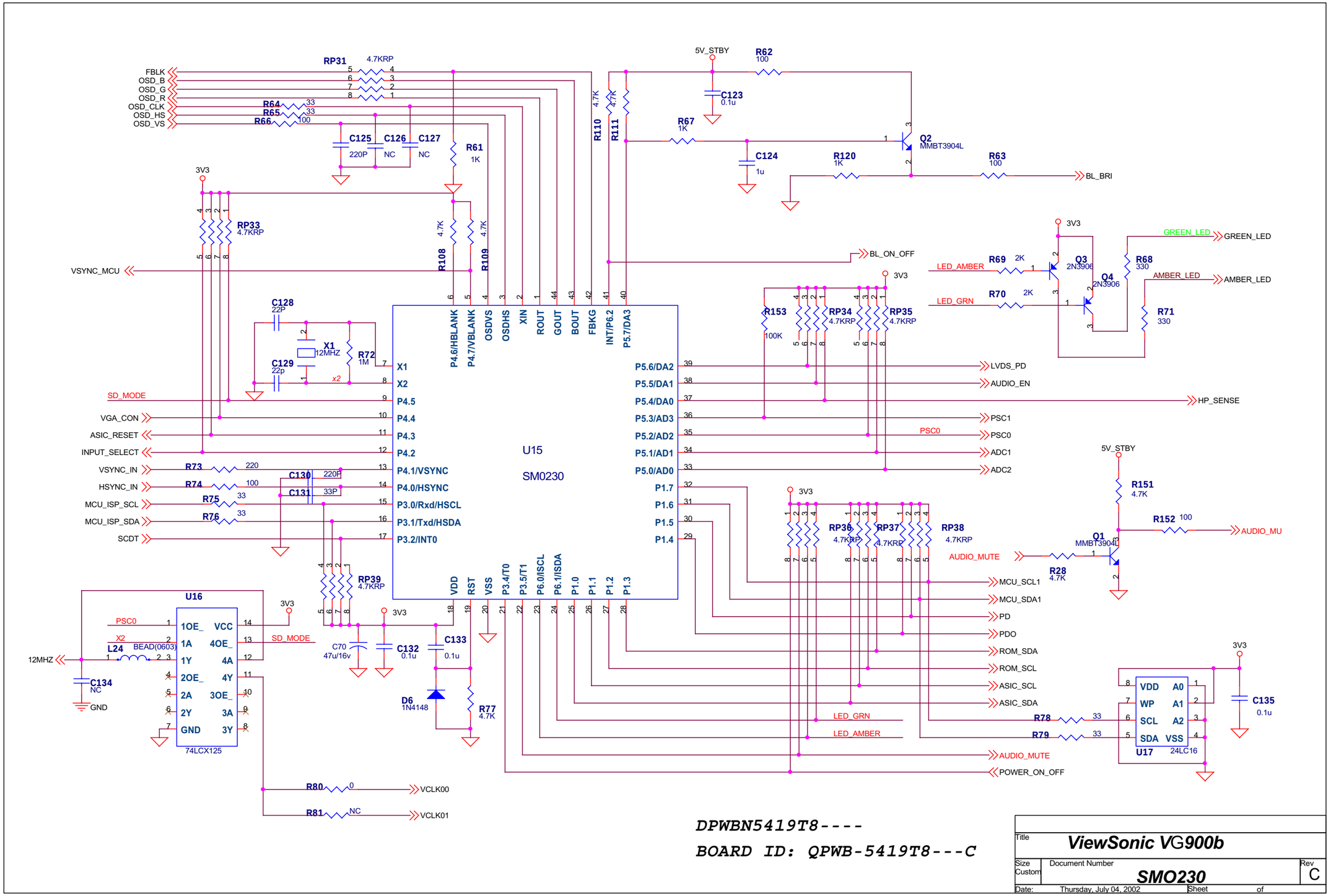
RP31 4.7KRP
FBLK
OSD_B
OSD_G
OSD_R
OSD_CLK
OSD_HS
OSD_VS
R64 33
R65 33
R66 100
C125 220P
C126 NC
C127 NC
R61 1K
R110 4.7K
R111 4.7K
5V_STBY
R62 100
C123 0.1u
R67 1K
C124 1u
R120 1K
Q2 MMBT3904L
R63 100
BL_BRI
3V3
RP33 4.7KRP
VSYNC_MCU
R108 4.7K
R109 4.7K
BL_ON_OFF
C128 22P
X1 12MHZ
C129 22p
R72 1M
x2
SD_MODE
VGA_CON
ASIC_RESET
INPUT_SELECT
VSYNC_IN
HSYNC_IN
MCU_ISP_SCL
MCU_ISP_SDA
SCDT
R73 220
R74 100
R75 33
R76 33
C130 220P
C131 33P
U15
SM0230
P4.6/HBLANK
P4.7/VBLANK
OSDVS
OSDHS
XIN
ROUT
GOUT
BOUT
FBKG
INT/P6.2
P5.7/DA3
P4.5
P4.4
P4.3
P4.2
P4.1/VSYNC
P4.0/HSYNC
P3.0/Rxd/HSCL
P3.1/Txd/HSDA
P3.2/INT0
P5.6/DA2
P5.5/DA1
P5.4/DA0
P5.3/AD3
P5.2/AD2
P5.1/AD1
P5.0/AD0
P1.7
P1.6
P1.5
P1.4
VDD
RST
VSS
P3.4/T0
P3.5/T1
P6.0/ISCL
P6.1/ISDA
P1.0
P1.1
P1.2
P1.3
R153 100K
RP34 4.7KRP
RP35 4.7KRP
LVDS_PD
AUDIO_EN
HP_SENSE
PSC1
PSC0
ADC1
ADC2
RP36 4.7KRP
RP37 4.7KRP
RP38 4.7KRP
MCU_SCL1
MCU_SDA1
PD
PDO
ROM_SDA
ROM_SCL
ASIC_SCL
ASIC_SDA
LED_GRN
LED_AMBER
AUDIO_MUTE
POWER_ON_OFF
LED_AMBER
LED_GRN
R69 2K
R70 2K
Q3 2N3906
Q4 2N3906
R68 330
R71 330
GREEN_LED
AMBER_LED
5V_STBY
R151 4.7K
R152 100
AUDIO_MU
Q1 MMBT3904L
R28 4.7K
AUDIO_MUTE
U16
74LCX125
PSC0
X2
L24 BEAD(0603)
12MHZ
C134 NC
GND
SD_MODE
RP39 4.7KRP
C70 47u/16v
C132 0.1u
C133 0.1u
D6 1N4148
R77 4.7K
R80 0
R81 NC
VCLK00
VCLK01
U17 24LC16
R78 33
R79 33
C135 0.1u
DPWBN5419T8----
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Document Number
SMO230
Rev
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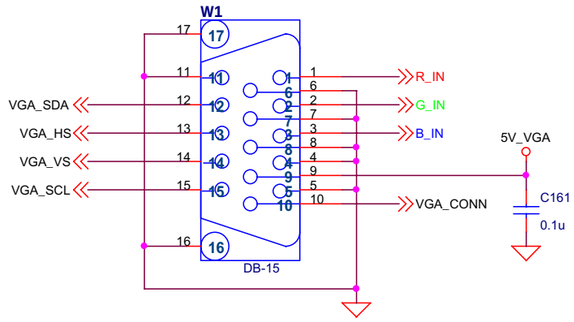
T50	5Va
T51	BL_ENABLE
T52	BL_ADJUST
T53	LCD_VCC
T54	12V_AUDIO

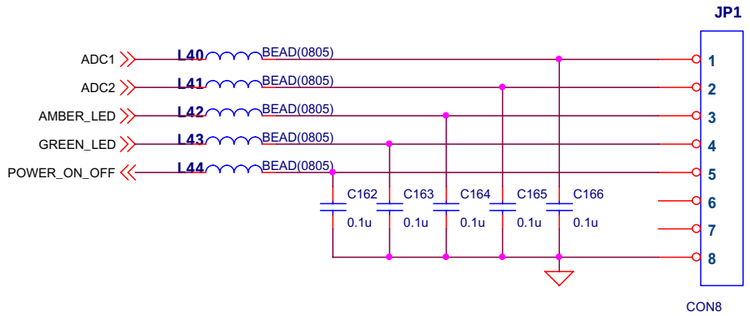
add silk position "U18A"

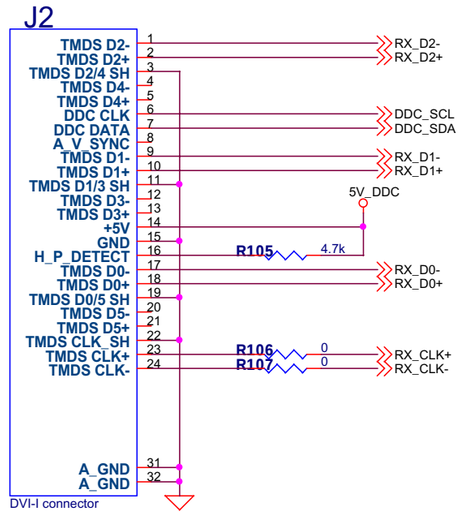
DPWBN5419T8----

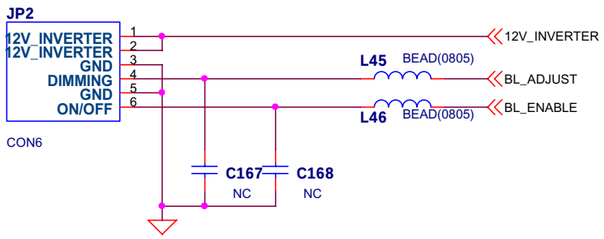
BOARD ID: QPWB-5419T8---C

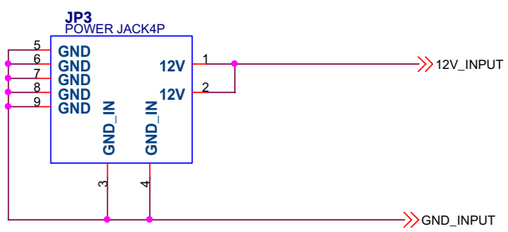
Title	ViewSonic VG900b		
Size: Custom	Document Number: POWER		Rev: C
Date: Thursday, July 04, 2002	Sheet	of	

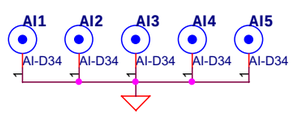


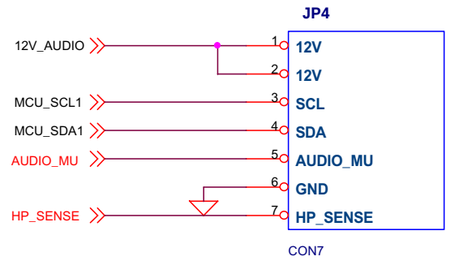












DPWBN5419T8----

BOARD ID: QPWB-5419T8---C

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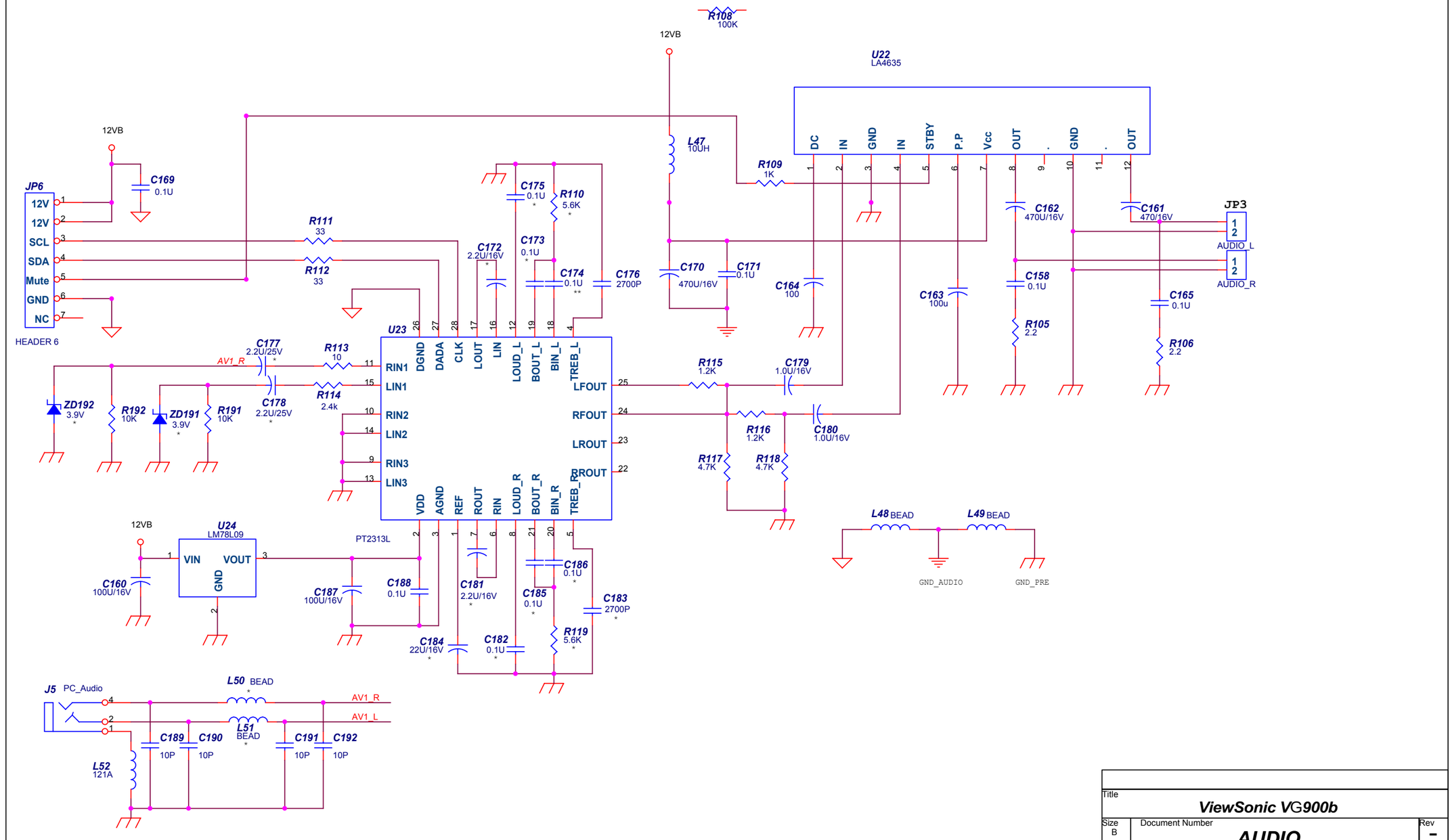

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Size B	Document Number AUDIO	Rev -
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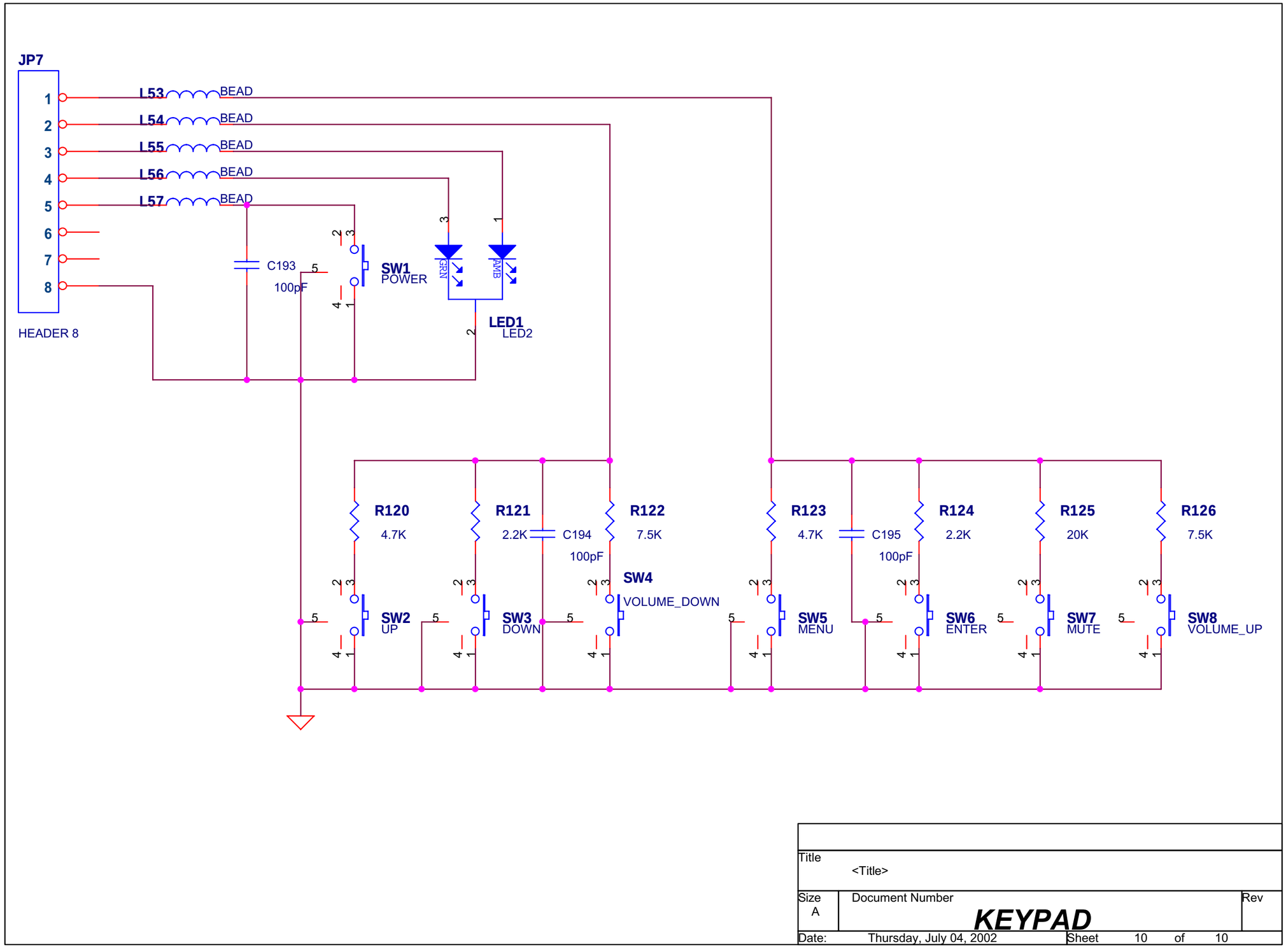
JP7
1
2
3
4
5
6
7
8
HEADER 8
L53 BEAD
L54 BEAD
L55 BEAD
L56 BEAD
L57 BEAD
C193
100pF
SW1
POWER
GRN
AMB
LED1
LED2
R120
4.7K
R121
2.2K
C194
100pF
R122
7.5K
SW2
UP
SW3
DOWN
SW4
VOLUME_DOWN
R123
4.7K
C195
100pF
R124
2.2K
R125
20K
R126
7.5K
SW5
MENU
SW6
ENTER
SW7
MUTE
SW8
VOLUME_UP
Title
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Size
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Document Number
KEYPAD
Rev
Date:
Thursday, July 04, 2002
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10. PCB LAYOUT DIAGRAM